

FIG. 1

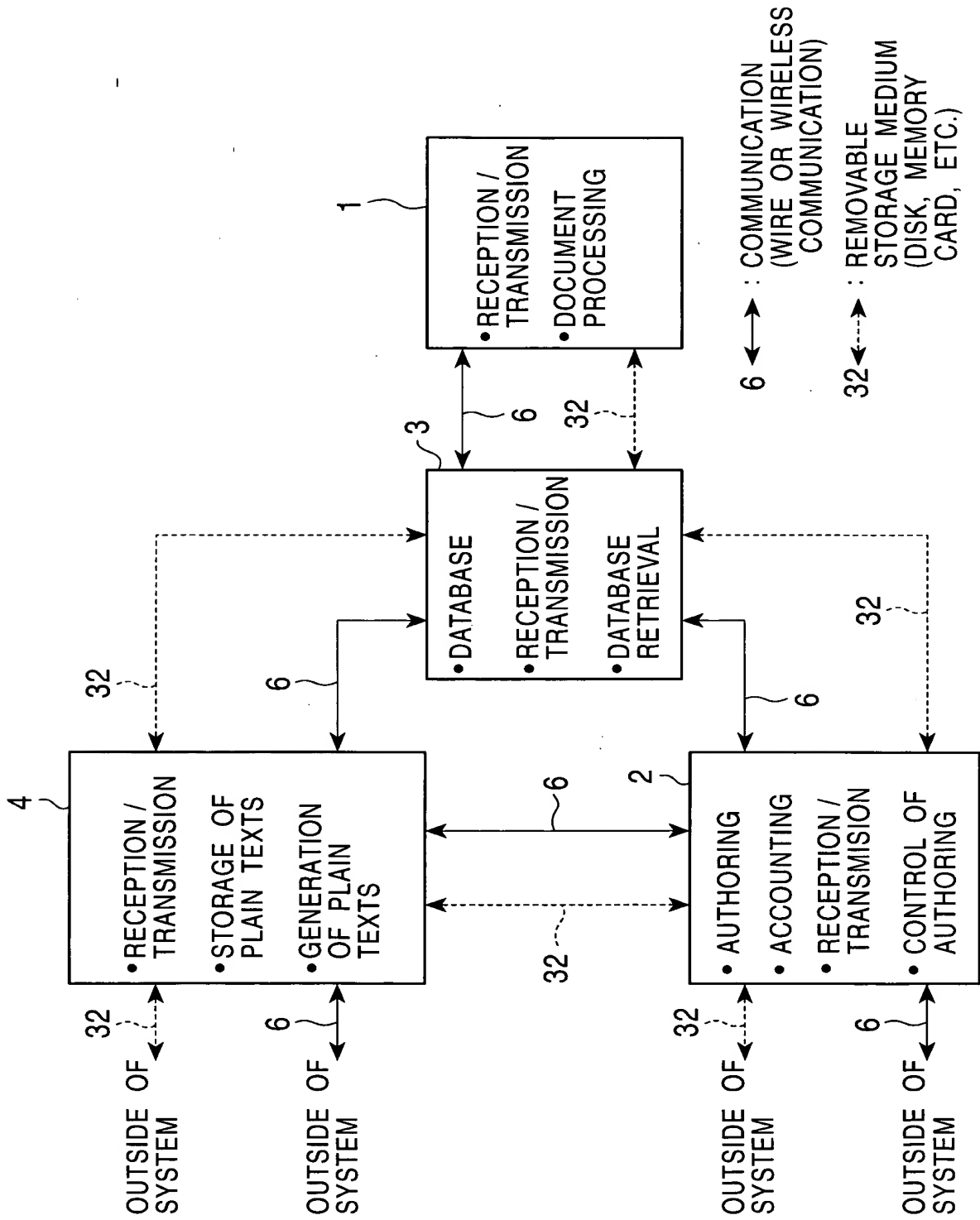


FIG. 2

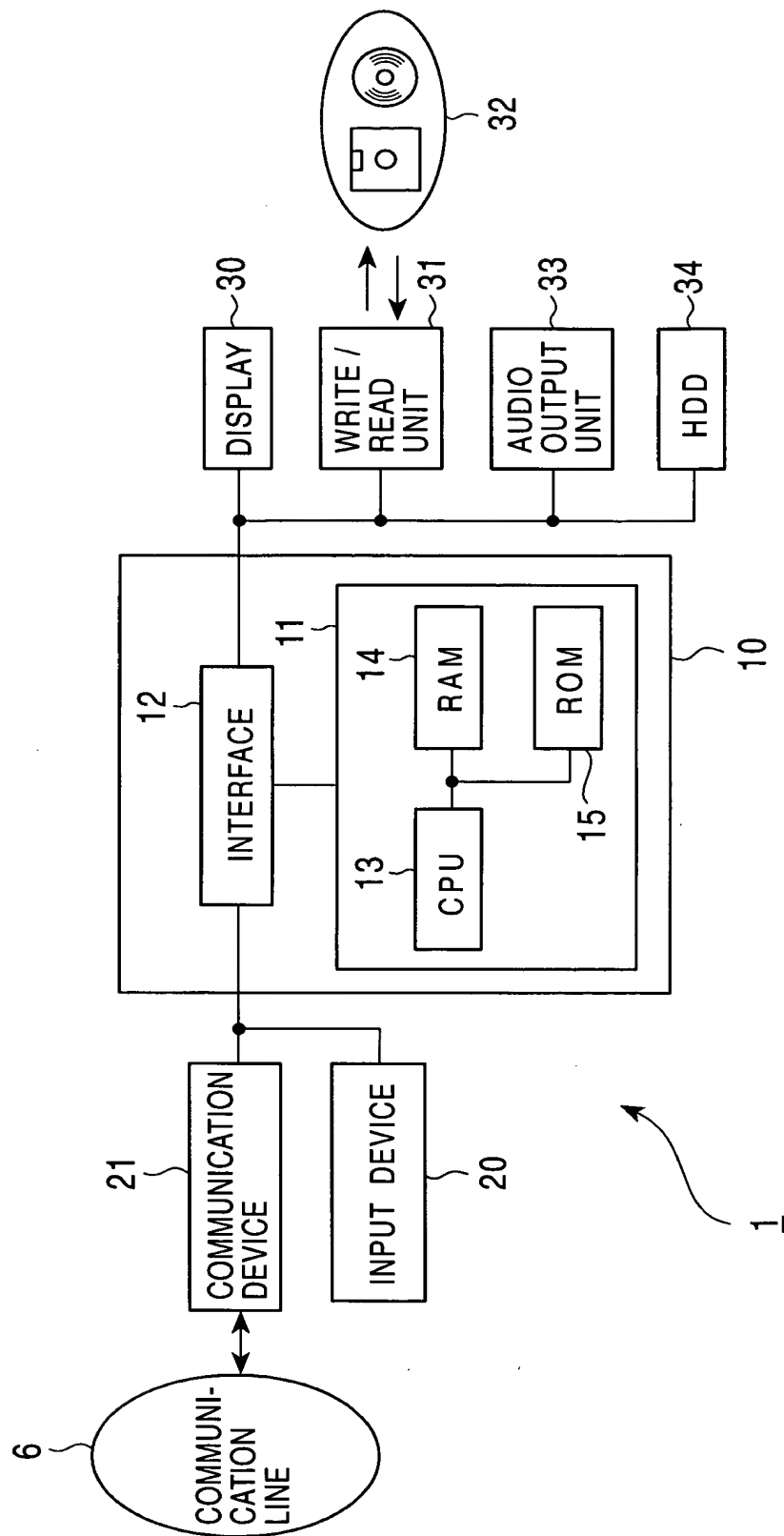
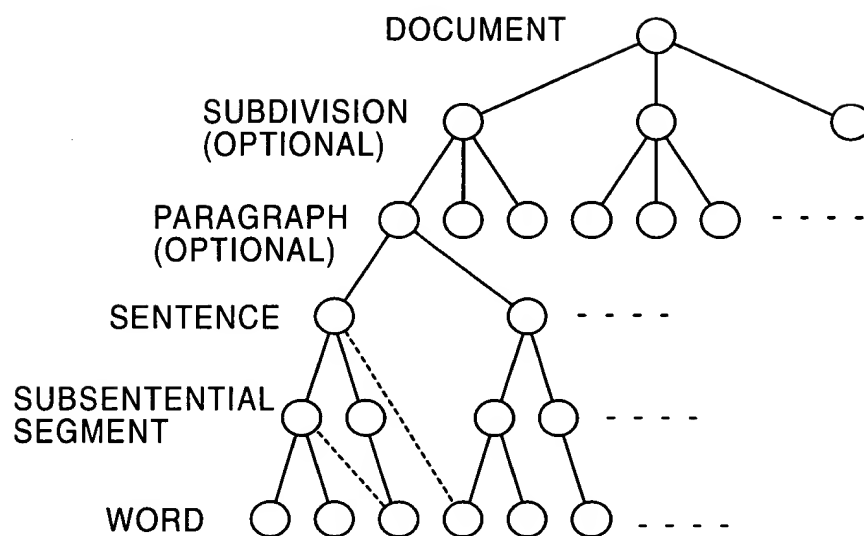


FIG. 3



○ : ELEMENT

— : NORMAL LINK

----- : REFERENCE LINK

FIG. 4

The diagram illustrates a Japanese sentence analysis system. It consists of two main windows: a sentence input window (101) and a display window (102).

Window 101 (Sentence Input): Contains the text "AAAAA" and a set of window control buttons (minimize, maximize, close).

Window 102 (Display): Displays the analysis results for the sentence "A氏のB会が終わったC市で一部のマスコミが新聞を読んだ". The results are organized into a table with columns for the analysis type, the specific analysis, and the corresponding text from the sentence.

Analysis Type	Analysis	Text
document	1 sentence	A氏のB会が終わったC市で一部のマスコミが新聞を読んだ
adverb phrase	relation="place"	で
	relation="subject"	が
	relation="possession"	の
	relation="object"	を
	relation="content"	の
	relation="coreference"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
noun phrase	identifier="C 市"	C 市
	identifier="B 会"	B 会
	identifier="A 氏"	A 氏
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
adverb	relation="place"	で
	relation="subject"	が
	relation="possession"	の
	relation="object"	を
	relation="content"	の
	relation="coreference"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
noun	identifier="C 市"	C 市
	identifier="B 会"	B 会
	identifier="A 氏"	A 氏
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
adverb phrase	relation="place"	で
	relation="subject"	が
	relation="possession"	の
	relation="object"	を
	relation="content"	の
	relation="coreference"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
noun phrase	identifier="C 市"	C 市
	identifier="B 会"	B 会
	identifier="A 氏"	A 氏
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
adverb	relation="place"	で
	relation="subject"	が
	relation="possession"	の
	relation="object"	を
	relation="content"	の
	relation="coreference"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
	relation="parallel"	の
noun	identifier="C 市"	C 市
	identifier="B 会"	B 会
	identifier="A 氏"	A 氏
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞
	identifier="マスコミ"	マスコミ
	identifier="一部のマスコミ"	一部のマスコミ
	identifier="新聞"	新聞

FIG. 5

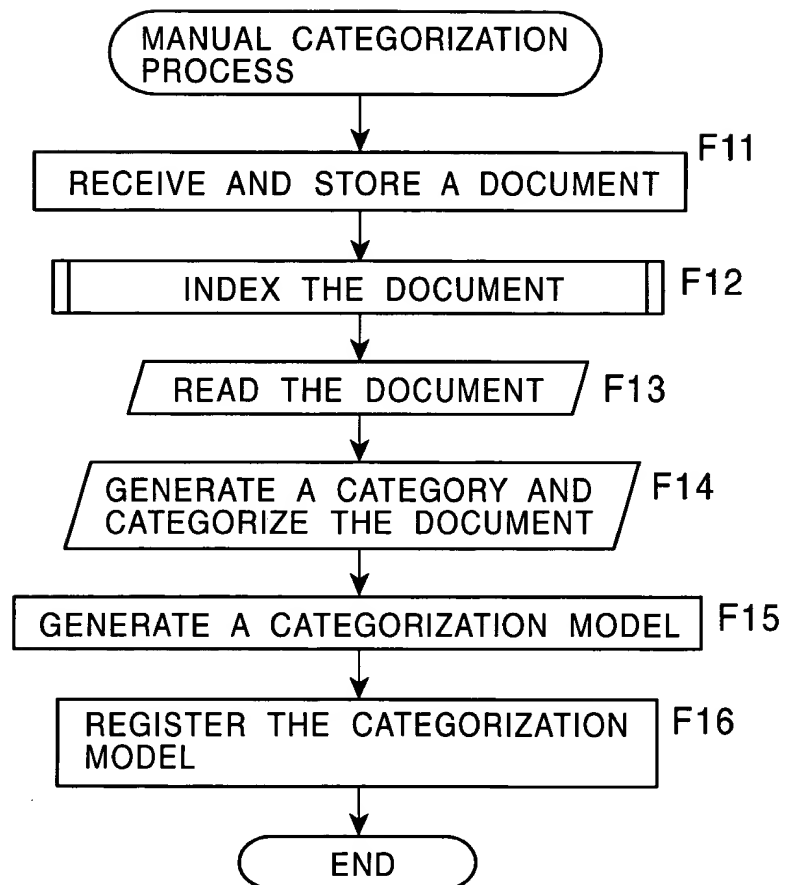


FIG. 6

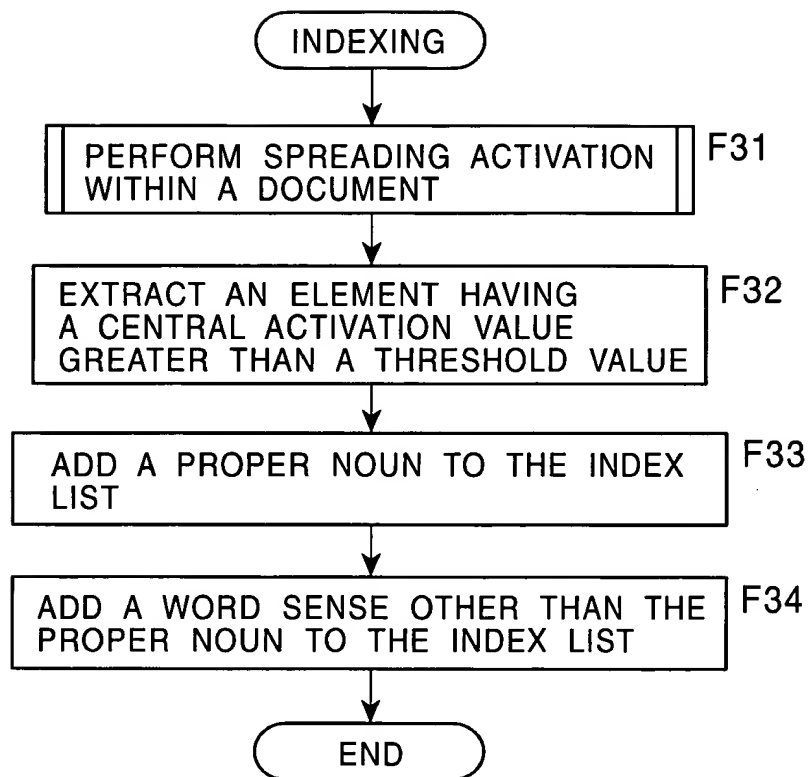
F14, F22

FIG. 7

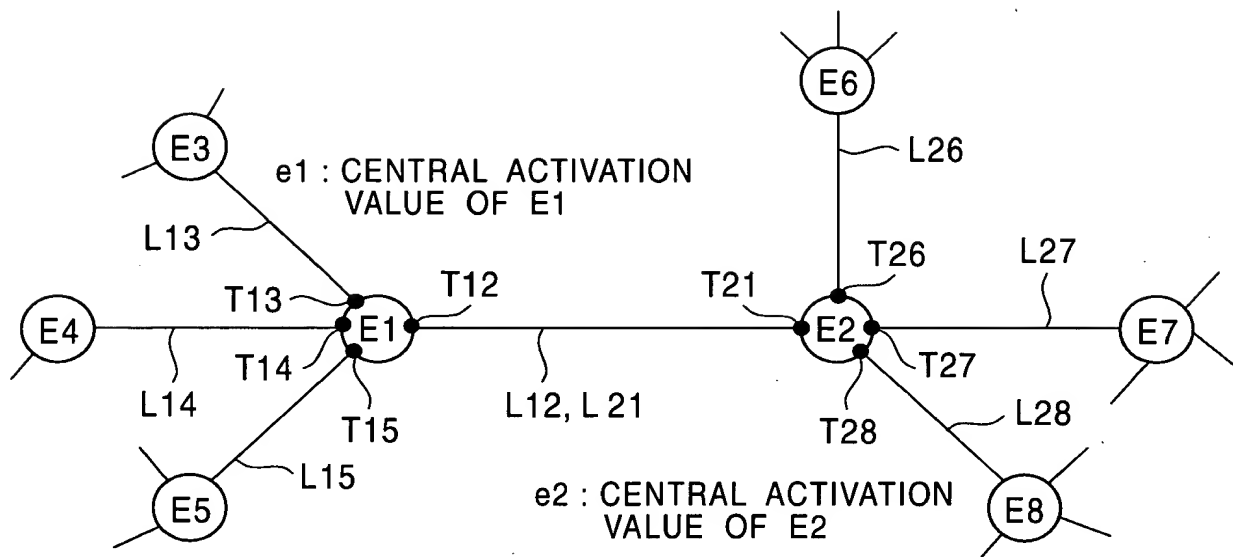


FIG. 8

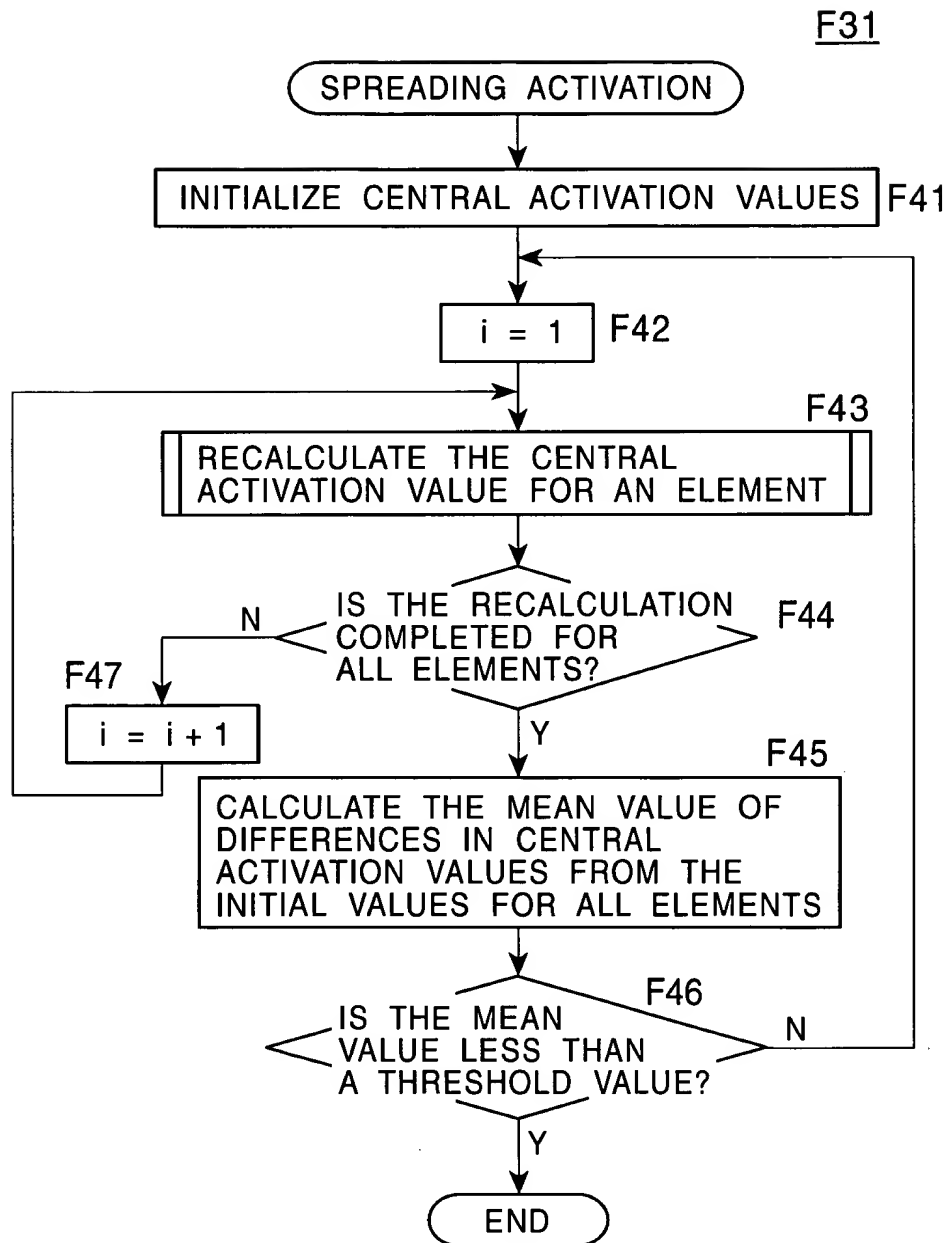


FIG. 9

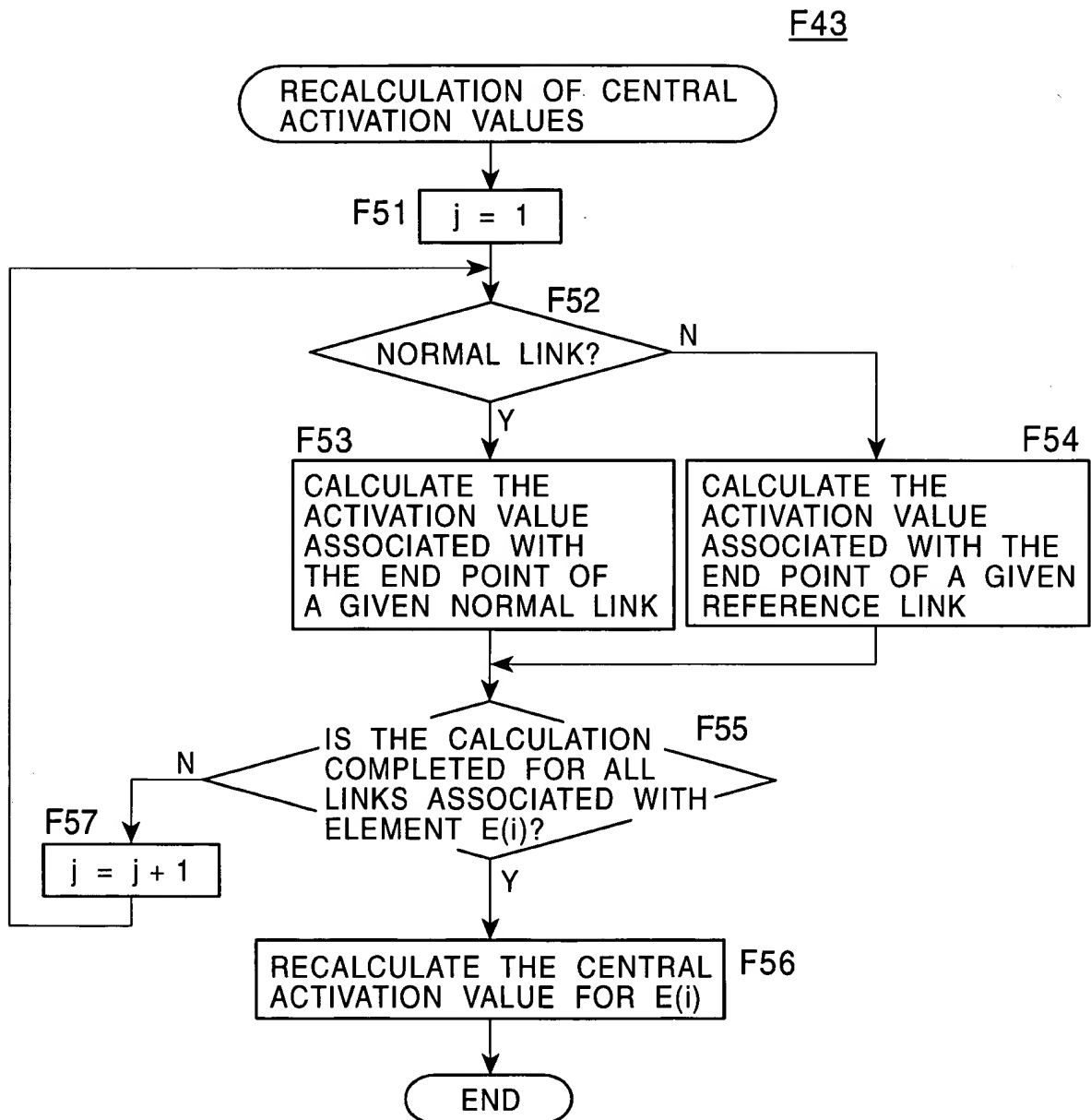


FIG. 10

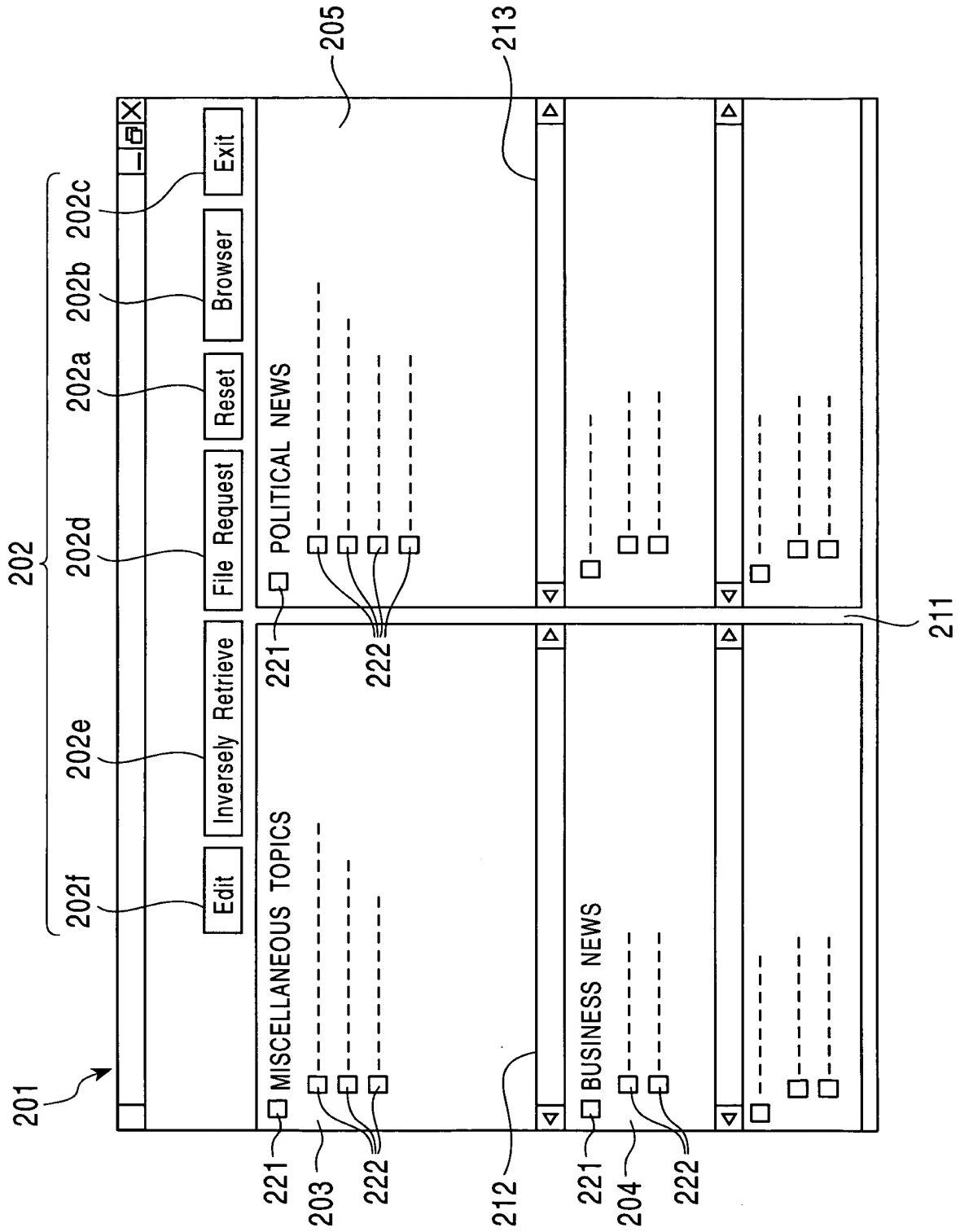


FIG. 11

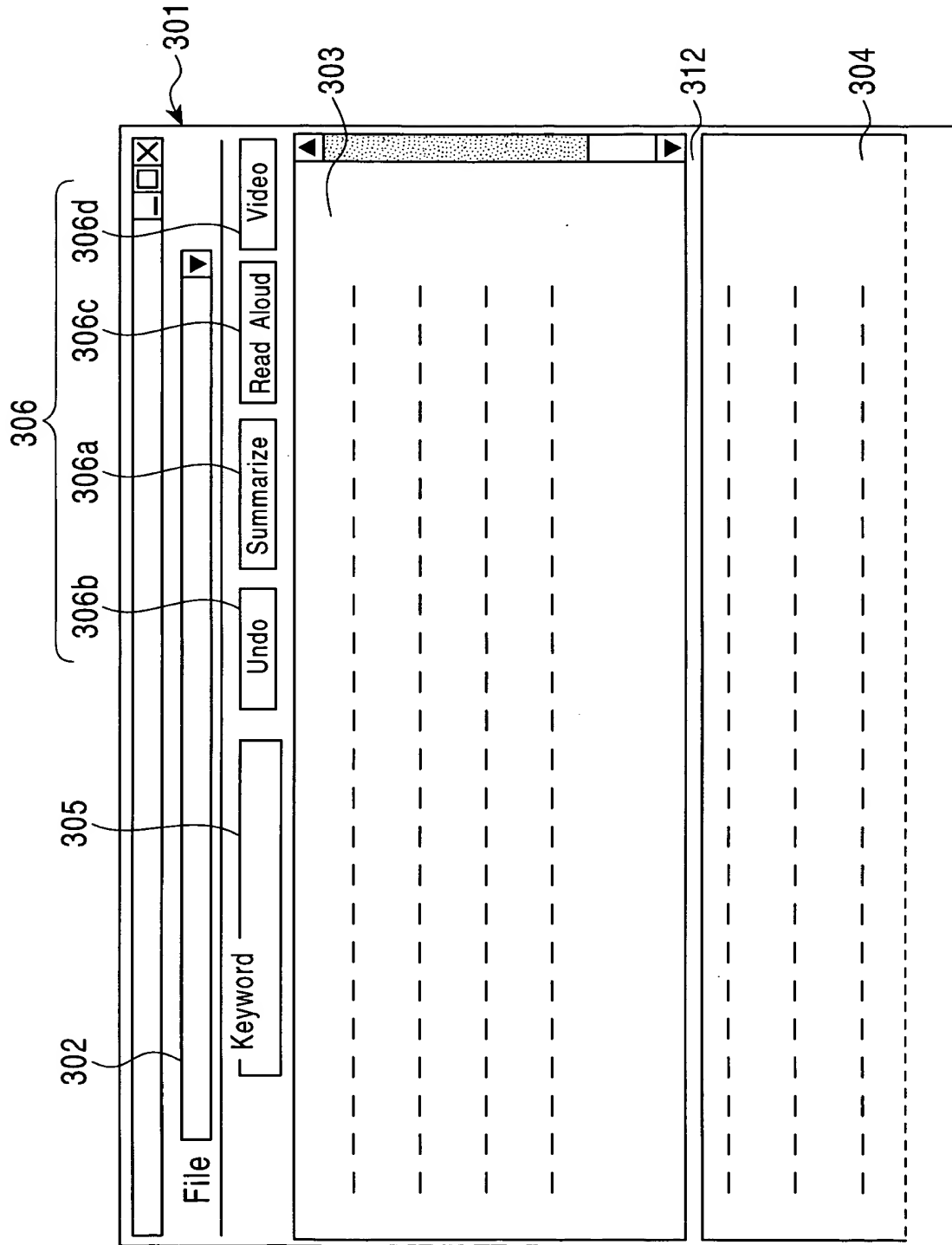


FIG. 12A

DATE AND TIME OF UPDATING	1999 : 12 : 10 : 19 : 56 : 10					
CATEGORY	SPORT	COMPANY	COMPUTER	PLANT	ART	EVENT
INDEX	IDX1	IDX2	IDX3	IDX4	IDX5	IDX6
	IDX7	IDX8	IDX9	IDX10	IDX11	IDX12
	IDX13		IDX14			
	IDX15					

FIG. 12B

DATE AND TIME OF UPDATING	1999 : 12 : 10 : 19 : 56 : 10					
CATEGORY	SPORT	COMPANY	COMPUTER	PLANT	ART	EVENT
PROPER NOUN	MR. A	B COMPANY	C COMPANY G COMPANY	D SPECIES	MR. E	MR. F
WORD SENSE	BASEBALL (4546) GROUND (2343)	LABOR (3112) EMPLOYMENT (9821)	MOBILE (2102)	CHERRY-1 (1111) ORANGE-1 (9911)	CHERRY-2 (1112) ORANGE-2 (9912)	CHERRY-3 (1113)
DOCUMENT ADDRESS	SP1 SP2 SP3 ...	SO1 SO2 SO3 ...	CO1 CO2 CO3 ...	PL1 PL2 PL3 ...	AR1 AR2 AR3 ...	EV1 EV2 EV3 ...

FIG. 13

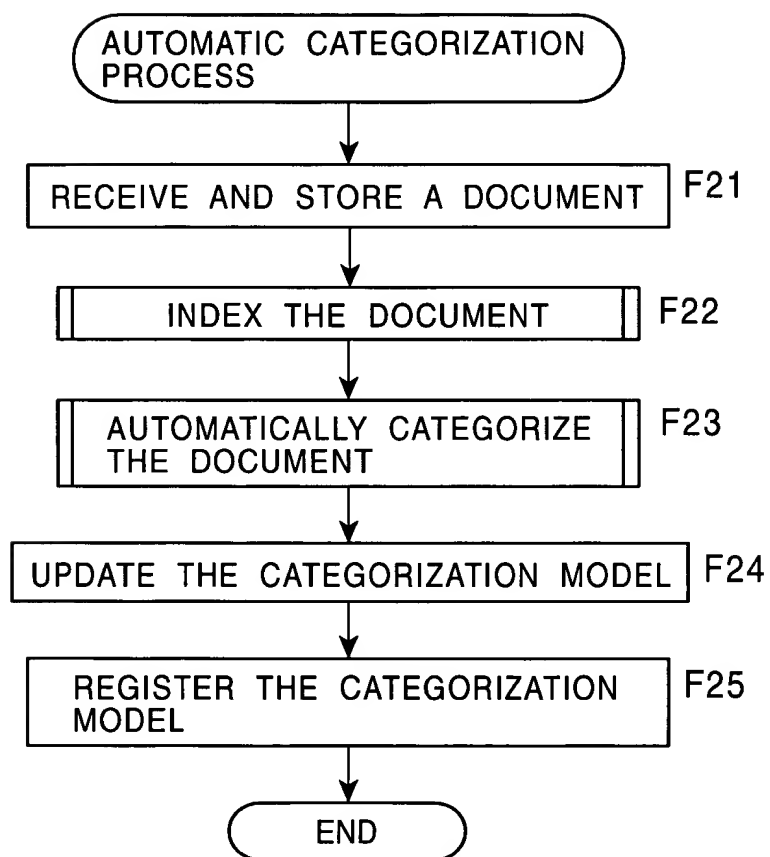


FIG. 14

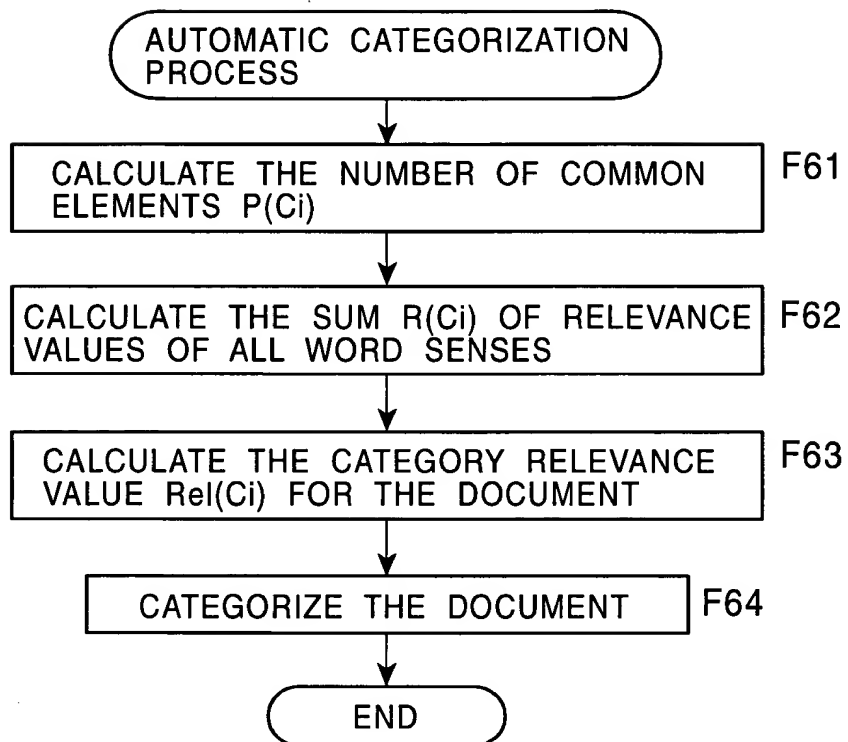
F23

FIG. 15

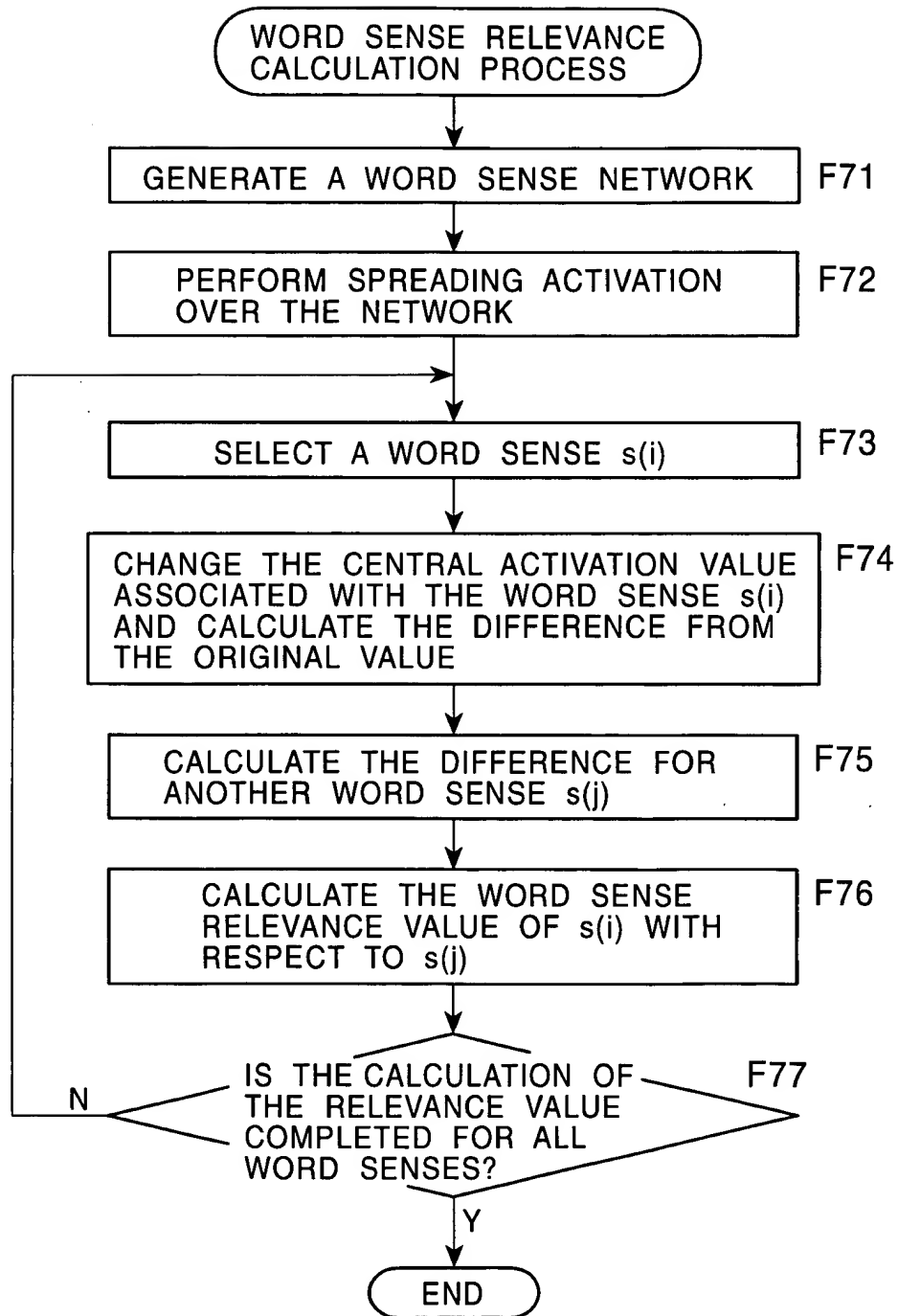


FIG. 16

	COMPUTER	TELEVISION	
COMPUTER		0.55	
TELEVISION	0.55		
VTR	0.25	0.60	

FIG. 17

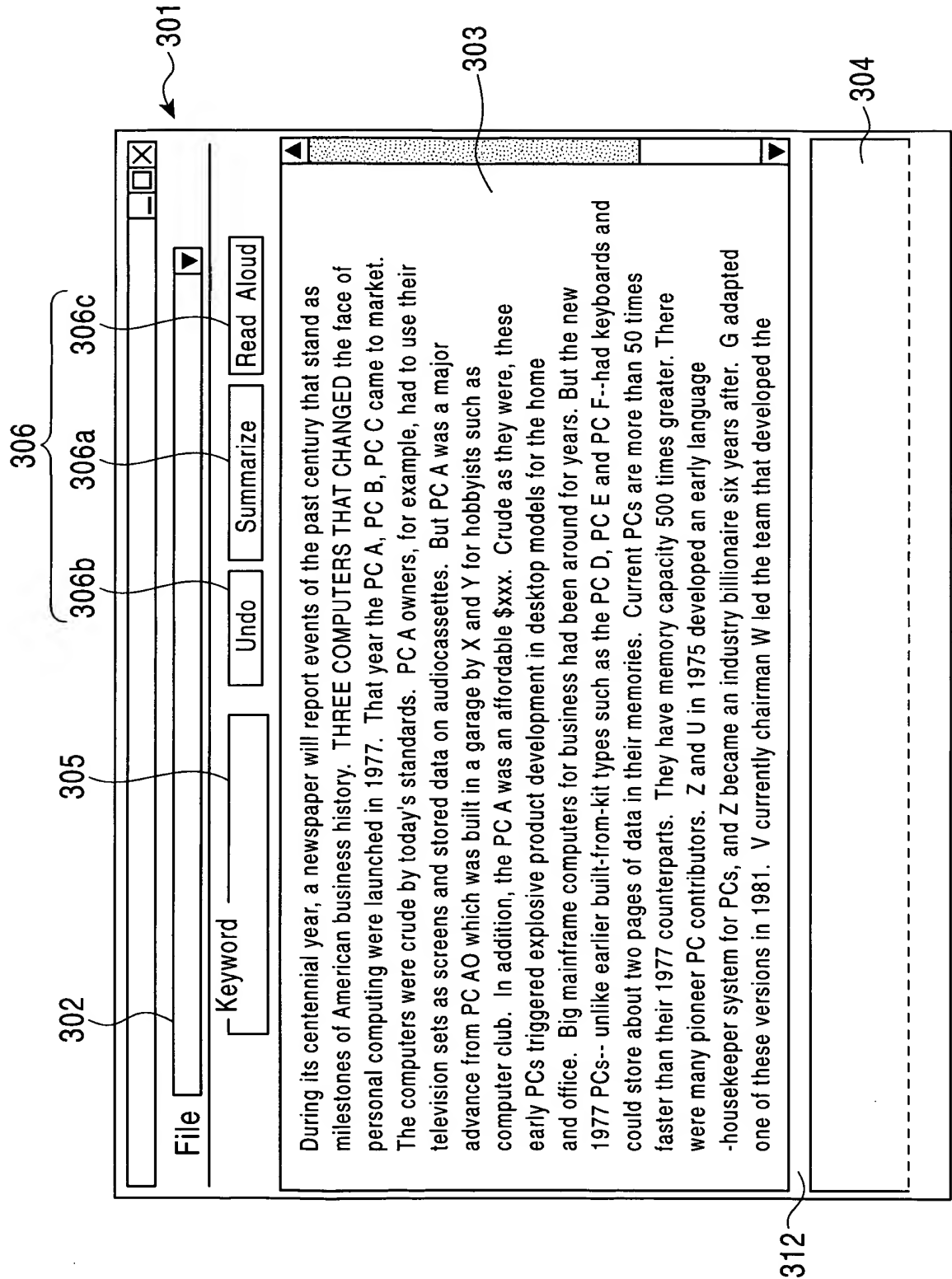


FIG. 18

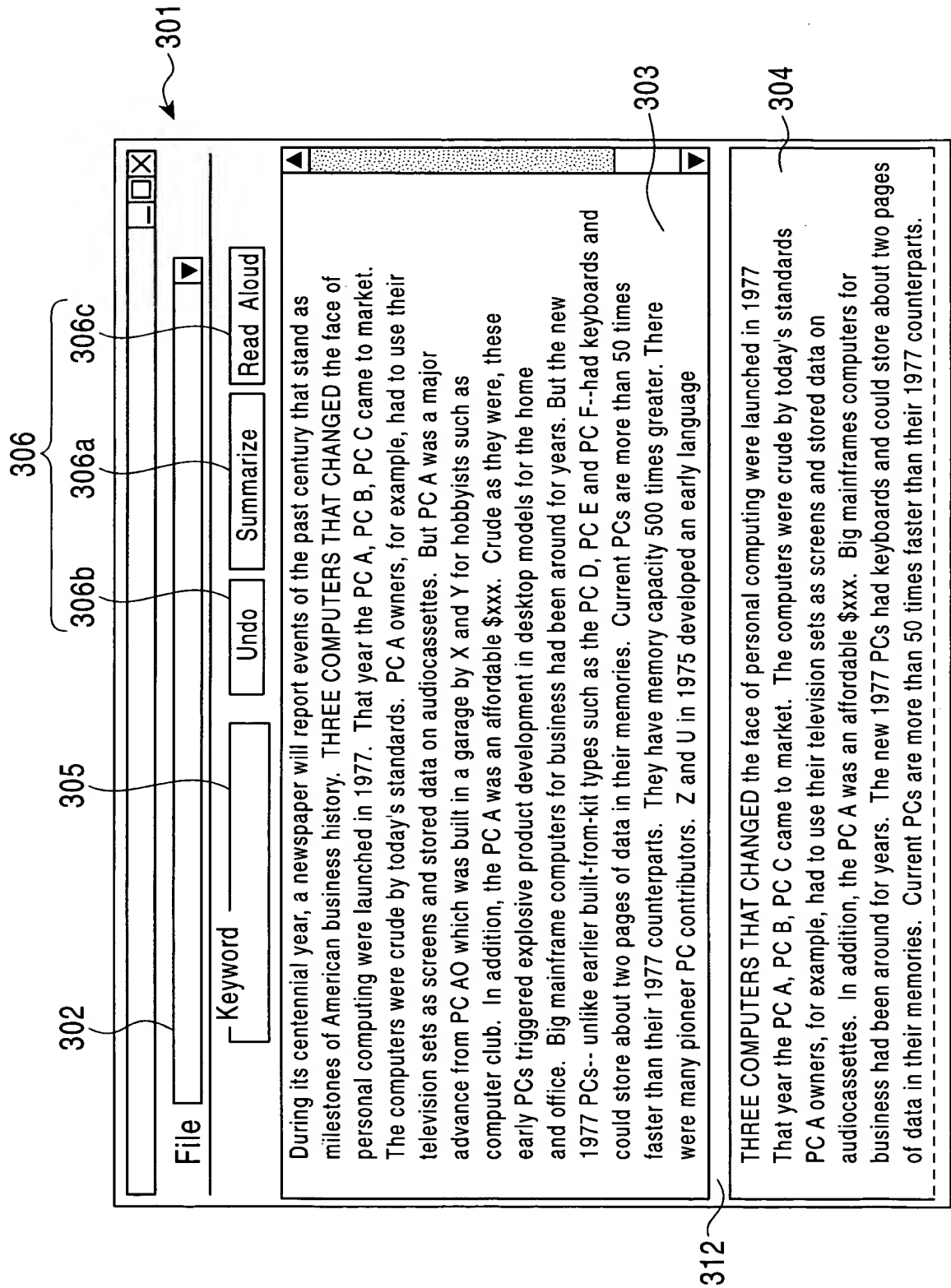


FIG. 19

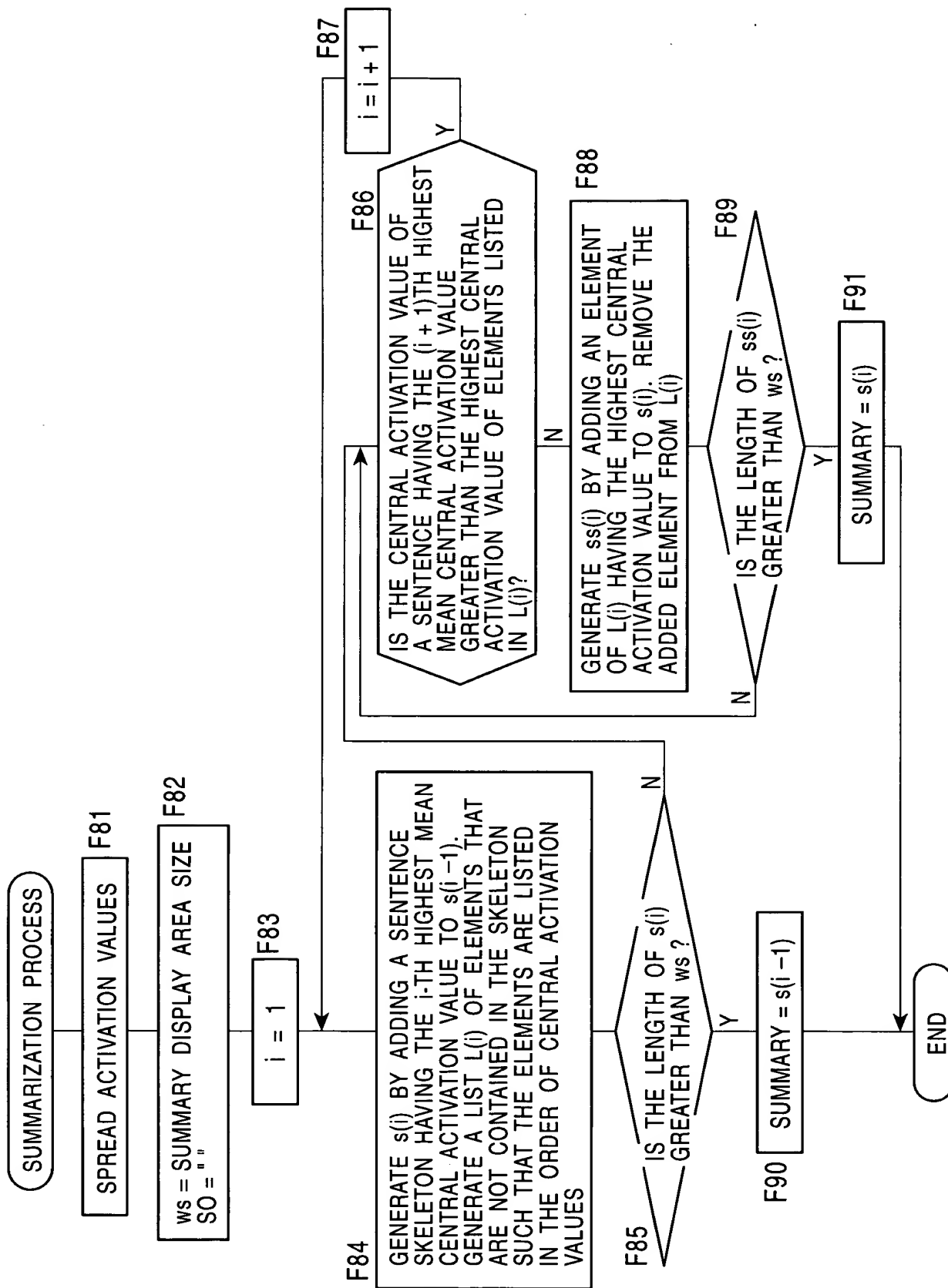


FIG. 20

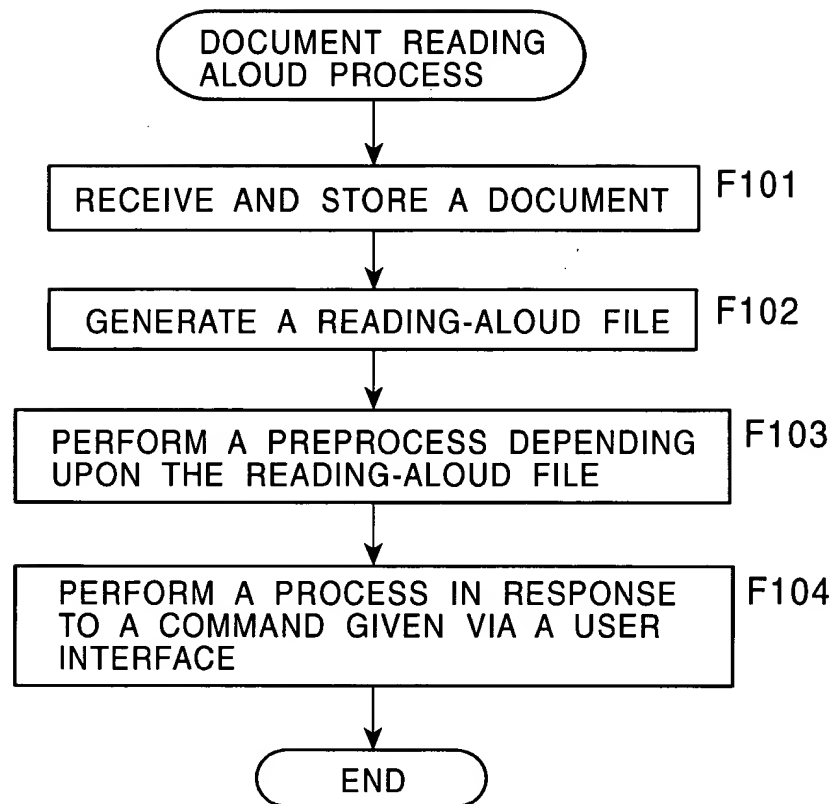


FIG. 21

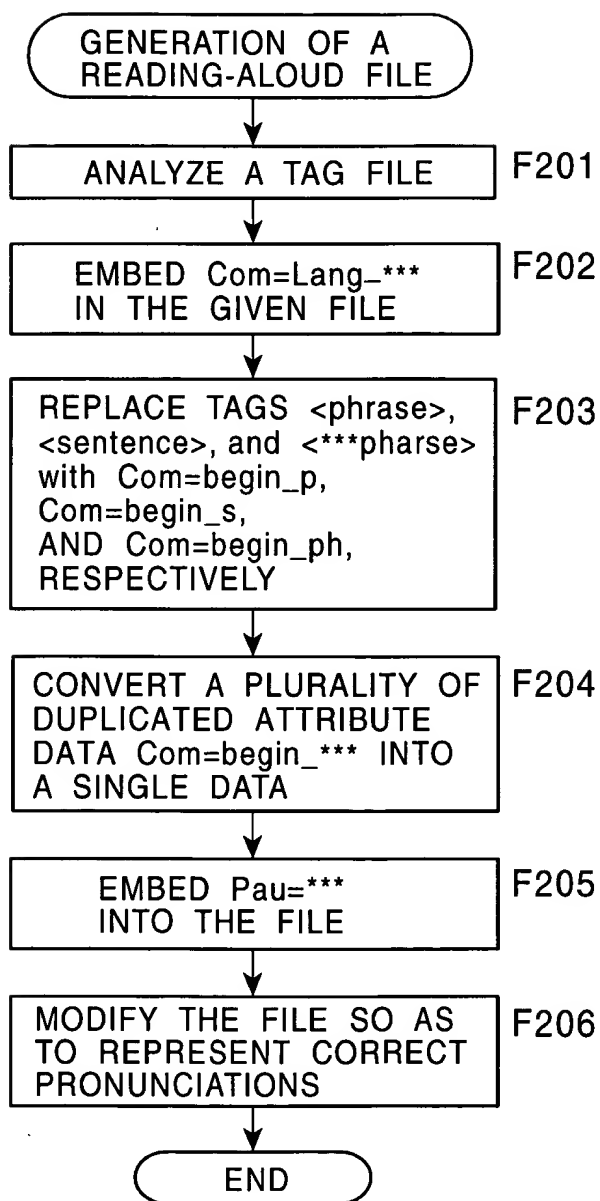
F102

FIG. 22A

```

<document><head><sentence>[<noun phrase><adjective phrase: word sense
= "3cf072"> 素敵に </adjective phrase><noun: identifier = "a200"> エイジング
</noun></noun phrase>/8</sentence><sentence><verb phrase: identifier =
"a876"><adverb phrase: relation = "object"><noun phrase: identifier = "a1000";
relation = "subject"; word sense = "3be2c7"> ガン </noun phrase><noun:
identifier= "a8"; word sense = "Off5e7"> 転移 </noun><adverb phrase> 抑え
</verb phrase> られる ! ? </sentence></head>

```

FIG. 22B

<paragraph><sentence><adverb phrase: relation = "subject"><noun phrase: coreference = "a89"> この転移 </noun phrase>, </adverb phrase><adverb phrase: relation = "condition"><adverb phrase: relation = "subject"><noun phrase: identifier "a15"><noun phrase: coreference = "a1"; relation = "essential"; word sense = "3be2c7"> がん </noun phrase><noun; word sense = "0f2e4c"> 細胞 </noun></noun phrase> が <adverb phrase> 増えるだけでは </adverb phrase> 発生しない。

</sentence><sentence><adverb phrase: relation = "subject"><noun phrase: identifier = "a18">; coreference = "a15"><noun phrase: coreference = "a1"; relation = "essential"> がん </noun phrase><noun: word sense = "0f2e4c"> 細胞 </noun></noun phrase> が </adverb phrase><adverb phrase: relation = "means"><adverb phrase: relation = "means"><adverb phrase: relation = "object"><noun phrase: identifier = "a12"><adverb phrase: relation = "undefined"><adverb phrase: relation = "indirect object"><adverb phrase: relation = "place"><noun phrase: syntax = "parallel"><noun phrase: word sense = "0f2e4c"> 細胞 </noun phrase> と <noun phrase: word sense = "0f2e4c"> 細胞 </noun phrase></noun phrase> の </adverb phrase> 間に </adverb phrase> ある </adverb phrase> <noun phrase><noun: syntax = "backward dependency"> 蛋白

<exception: relation = "undefined"; pronunciation = "null"> (たんぱく) </exception></noun> 質 </noun phrase>などを </adverb phrase> 溶かし、 </adverb phrase><adverb phrase: relation = "object"><verb phrase: relation =

"undefined"><adverb phrase: relation = "subject"><noun phrase: coreference = "a18"; word sense = "0f6fa3"> 自分 </noun phrase>の </adverb phrase> 進む </verb phrase> 道を </adverb phrase> つくって、 </adverb phrase><adverb phrase: relation = "indirect object"><noun phrase: identifier = "a33"; syntax = "parallel"><noun phrase; word sense = "0ef4e6">

血管 </noun phrase> や <noun phrase: pronunciation = "りんぱかん"> リンパ管 </noun phrase></noun phrase> に </adverb phrase> 入り込む。

</sentence><sentence: identifier = "a16"><adverb phrase: relation = "主語"><verb phrase: relation = "content"><adverb phrase: relation = "object"><noun phrase><adverb phrase: relation = "content"><adverb phrase><adverb phrase> 循環しながら </adverb phrase><verb><verb phrase: relation = "undefined"><adverb phrase: relation = "object"><noun phrase: identifier = "a69"> 新たな " <noun: pronunciation = "すみか"> 住み家

</noun>" </noun phrase> を </adverb phrase> 探して </verb phrase> 潜り込む、 </verb></adverb phrase> といった </adverb phrase><adjective phrase: relation = "undefined"; word sense = "3ce6b4"> 複雑な </adjective phrase> 動き </noun phrase> を </adverb phrase> する </verb phrase> ことが、 </adverb phrase><noun phrase: relation = "time"> 近年 </noun phrase> 解明されつつある。 </sentence></paragraph></document>

EXAMPLE 1

EXAMPLE 2

EXAMPLE 3

FIG. 23

<document><sentence><adverb phrase: relation="time">During<noun phrase:
 relation="essential"><adverb phrase: coreference="wsj">its</adverb phrase><adjective
 phrase>centennial</adjective phrase>year</noun phrase>,</adverb phrase><proper
 noun phrase: identifier="wsj" relation="subject">The Wall Street Journal</proper noun phrase>
 will report<noun phrase: relation="object">events<adverb phrase>of<noun phrase>the past
 century</noun phrase></adverb phrase><complementary sentence><noun phrase>that</noun
 phrase>stand<adverb phrase: relation="essential">as<noun phrase>milestones<adverb phrase>
 of<noun phrase>American business history</noun phrase></adverb phrase></noun phrase>
 </adverb phrase></complementary sentence></noun phrase>.</sentence><sentence><noun
 phrase: coreference="a3" relation="subject"><cardinal number phrase: type="integer"; value="3";
 relation="essential">THREE</cardinal number phrase>COMPUTERS<complementary
 sentence>THAT CHANGED<noun phrase: relation="object">the face<adverb phrase>of<noun
 phrase>personal computing</noun phrase></adverb phrase></noun phrase></complementary
 sentence></noun phrase>were launched<adverb phrase: relation="time">in<date phrase
 identifier="a1977">1977</date phrase></adverb phrase></sentence><sentence><date phrase>
 That year</date phrase><proper noun phrase: identifier="a3"; syntax="parallel"; relation=
 "subject">the<proper noun phrase: identifier="a2">Apple<noun phrase: pronunciation="two">
 II</noun phrase></proper noun phrase>,<proper noun phrase: identifier="cp">Commodore
 Pet</proper noun phrase>and<proper noun phrase: identifier="trs">Tandy TRS</proper noun
 phrase></proper noun phrase>came<adverb phrase: relation="essential">to market</adverb
 phrase>.</sentence><set of sentences to be read continuously><sentence><noun phrase:
 coreference="a3"; relation="subject">The computers</noun phrase>were<adjective phrase:
 identifier="a87"; relation="essential">crude</adjective phrase><adverb phrase>by<noun
 phrase><adverb phrase>today's</adverb phrase>standards</noun phrase></adverb phrase>,</
 sentence><sentence: identifier="a222" relation="example"><noun phrase:
 identifier="aonrs" relation="subject"><proper noun phrase:
 coreference="a2">Apple<noun: pronunciation="two">II ← EXAMPLE 4
 </noun></proper noun phrase>owners</noun phrase><adjective phrase: relation=
 "undefined">,for example,</adverb phrase><verb: syntax=
 "parallel"><verb phrase>had to use<noun phrase: relation="object"><adverb phrase:
 coreference="aonrs">their</adverb phrase>television sets</noun phrase><adverb
 phrase>as screens</adverb phrase></verb phrase>and<verb phrase>stored<noun
 phrase: relation="object">data</noun phrase><adverb phrase: relation="indirect object">
 on audiocassettes</adverb phrase></verb phrase></verb>.</sentence></set of sentences
 to be read continuously></document>

FIG. 24A

¥Com=Lang=JPN¥¥Pau=100¥¥Com=begin_s¥ [¥Pau=50¥¥
Com=begin_ph¥ 素敵にエイジング] / 8 ¥Pau=100¥¥
Com=begin_s¥¥Pau=50¥¥Com=begin_ph¥ ガン転移、抑えら
れる！？

FIG. 24B

¥Pau=500¥¥Com=begin_p¥¥Pau=100¥¥Com=begin_s¥¥Pau=50¥¥
Com=begin_ph¥ この転移、¥Pau=50¥¥Com=begin_ph¥ ガン細胞が増
えるだけでは発生しない。¥Pau=100¥¥Com=begin_s¥¥Pau=50¥¥
Com=begin_ph¥ がん細胞が ¥Pau=50¥¥Com=begin_ph¥ 細胞と ¥
Pau=50¥¥Com=begin_ph¥ 細胞の間にある ¥Pau=50¥¥
Com=begin_ph¥ 蛋白質などを溶かし、¥Pau=50¥¥Com=begin_ph¥ 自
分の進む道をつくって、¥Pau=50¥¥Com=begin_ph¥ 血管や ¥
Pau=50¥¥Com=begin_ph¥ りんぱかんに入り込む。¥Pau=100¥¥
Com=begin_s¥¥Pau=50¥¥Com=begin_ph¥ 循環しながら Pau=50¥¥
Com=begin_ph¥¥ 新たな " すみか " を探して潜り込む、といった ¥
Pau=50¥¥Com=begin_ph¥ 複雑な動きをすることが、¥Pau=50¥¥
Com=begin_ph¥ 近年解明されつつある。

FIG. 25

¥Com=Lang=ENG¥¥Pau=100¥¥Com=begin_s¥¥Com=Vol=0¥¥Pau=50¥
 ¥Com=begin_ph¥During¥Pau=50¥¥Com=begin_ph¥its ¥Pau=50¥¥
 Com=begin_ph¥centennial year, ¥Pau=50¥¥Com=begin_ph¥The
 Wall Street Journal will report ¥Pau=50¥¥Com=begin_ph¥
 events¥Pau=50¥¥Com=begin_ph¥of ¥Pau=50¥¥Com=begin_ph¥
 the past century ¥Pau=50¥¥Com=begin_ph¥that stand ¥
 Pau=50¥¥Com=begin_ph¥as ¥Pau=50¥¥Com=begin_ph¥
 milestones ¥Pau=50¥¥Com=begin_ph¥of ¥Pau=50¥¥
 Com=begin_ph¥American business history.
 ¥Pau=100¥¥Com=begin_s¥¥Com=Vol=80¥¥Pau=50¥¥
 Com=begin_ph¥THREE COMPUTERS THAT CHANGED ¥Pau=50¥¥
 Com=begin_ph¥the face ¥Pau=50¥¥Com=begin_ph¥ of ¥Pau=50¥¥
 ¥Com=begin_ph¥personal computing were launched ¥Pau=50¥
 ¥Com=begin_ph¥ in ¥Pau=50¥¥Com=begin_ph¥1977.
 ¥Pau=100¥¥Com=begin_s¥¥Com=Vol=80¥¥Pau=50¥¥
 Com=begin_ph¥That year ¥Pau=50¥¥Com=begin_ph¥the ¥
 Pau=50¥¥Com=begin_ph¥Apple ¥Pau=50¥¥Com=begin_ph two, ¥
 Pau=50¥¥Com=begin_ph¥Commodore Pet and ¥Pau=50¥¥
 Com=begin_ph¥Tandy TRS came ¥Pau=50¥¥Com=begin_ph¥to
 market.
 ¥Pau=100¥¥Com=begin_s¥¥Com=Vol=80¥¥Pau=50¥¥
 Com=begin_ph¥The computers were ¥Pau=50¥¥Com=begin_ph¥
 crude ¥Pau=50¥¥Com=begin_ph¥by ¥Pau=50¥¥Com=begin_ph¥
 today's standards. ¥Pau=100¥¥Com=begin_s¥¥Com=Vol=0¥¥
 Pau=50¥¥Com=begin_ph¥Apple two owners ¥Pau=50¥¥
 Com=begin_ph¥, for example, ¥Pau=50¥¥Com=begin_ph¥had to
 use ¥Pau=50¥¥Com=begin_ph¥their television sets ¥
 Pau=50¥¥Com=begin_ph¥as screens and ¥Pau=50¥¥
 Com=begin_ph¥stored ¥Pau=50¥¥Com=begin_ph¥data ¥Pau=50¥
 ¥Com=begin_ph¥on audiocassettes.

FIG. 26

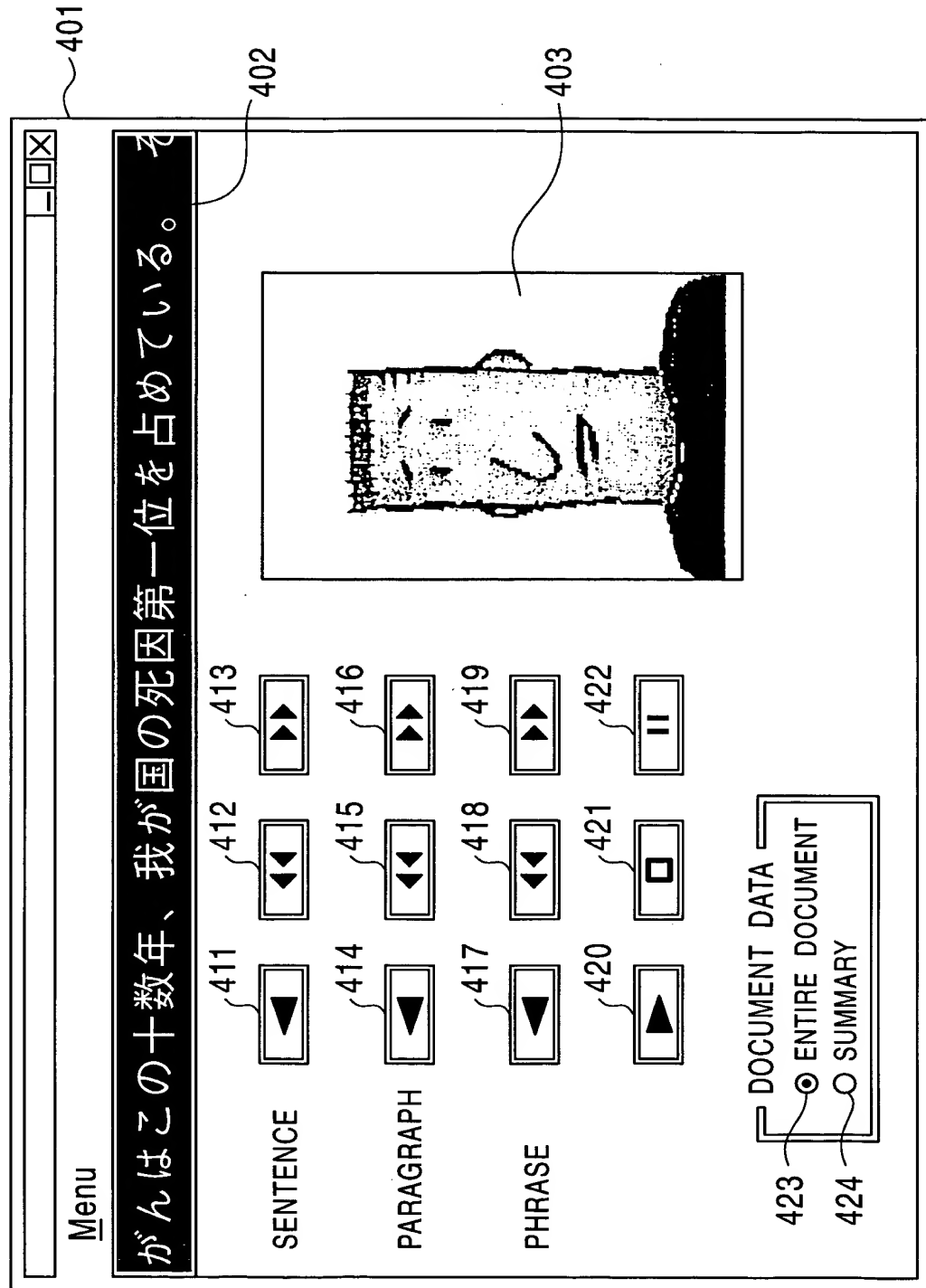


FIG. 28

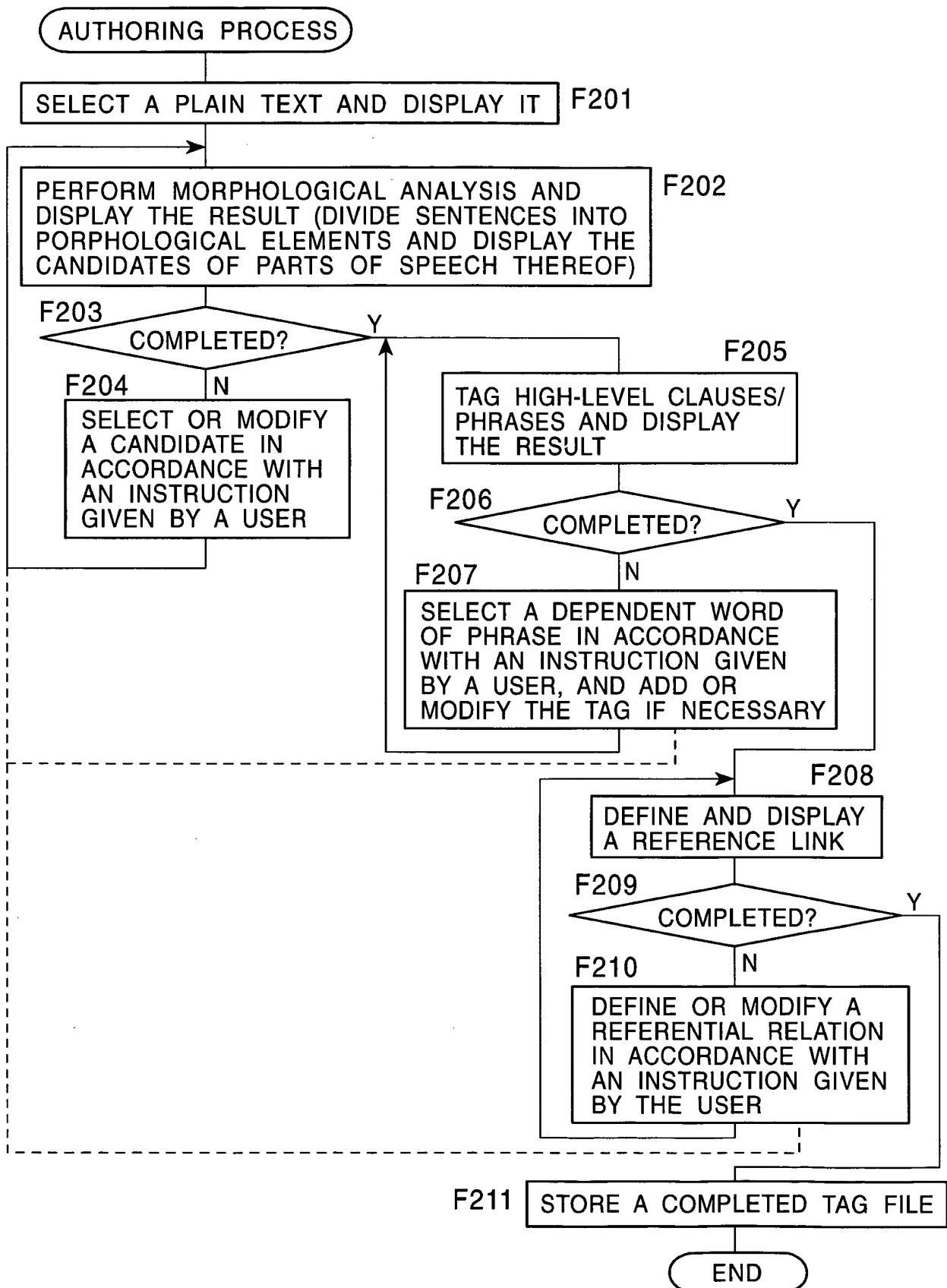


FIG. 29A

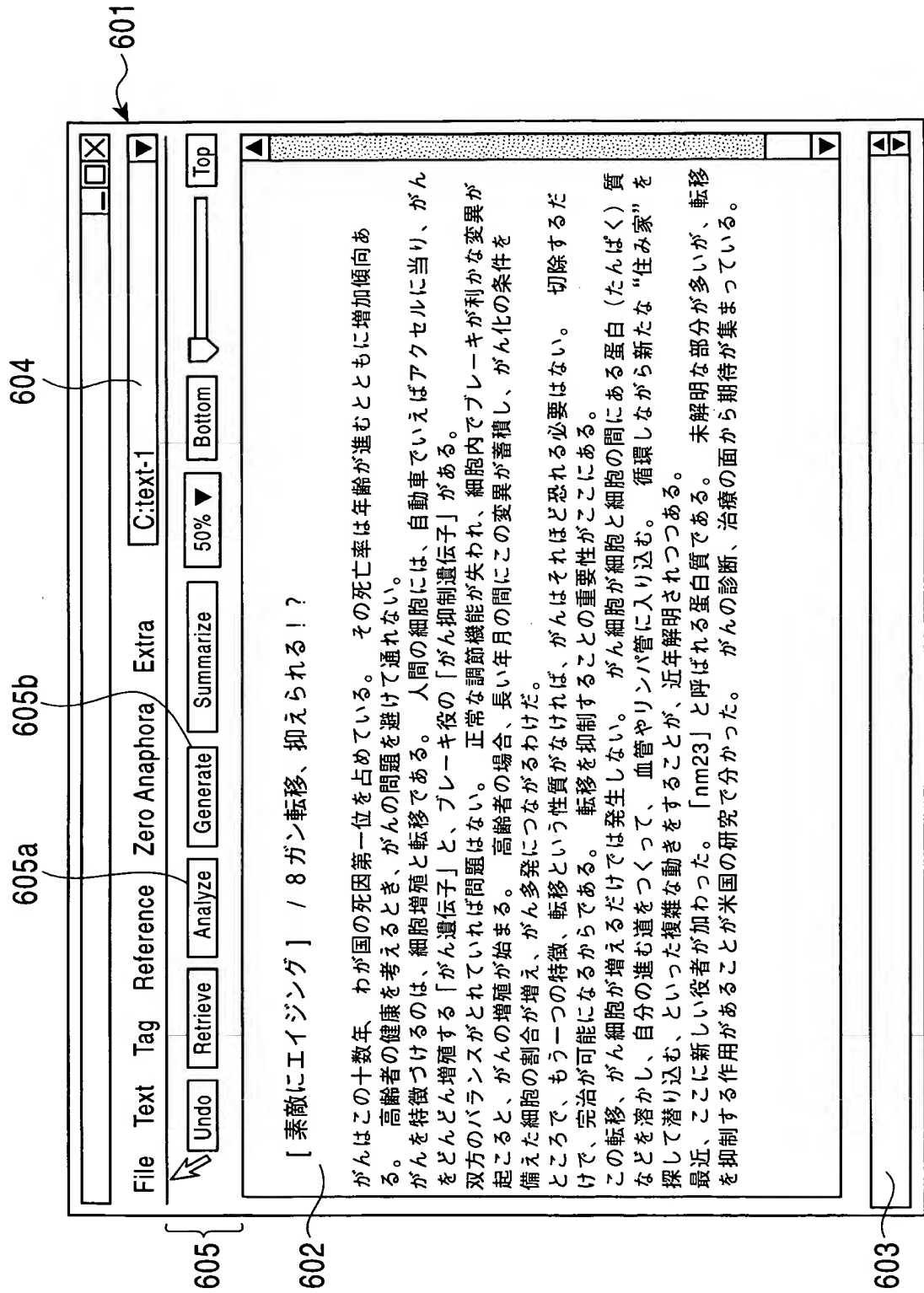


FIG. 29B

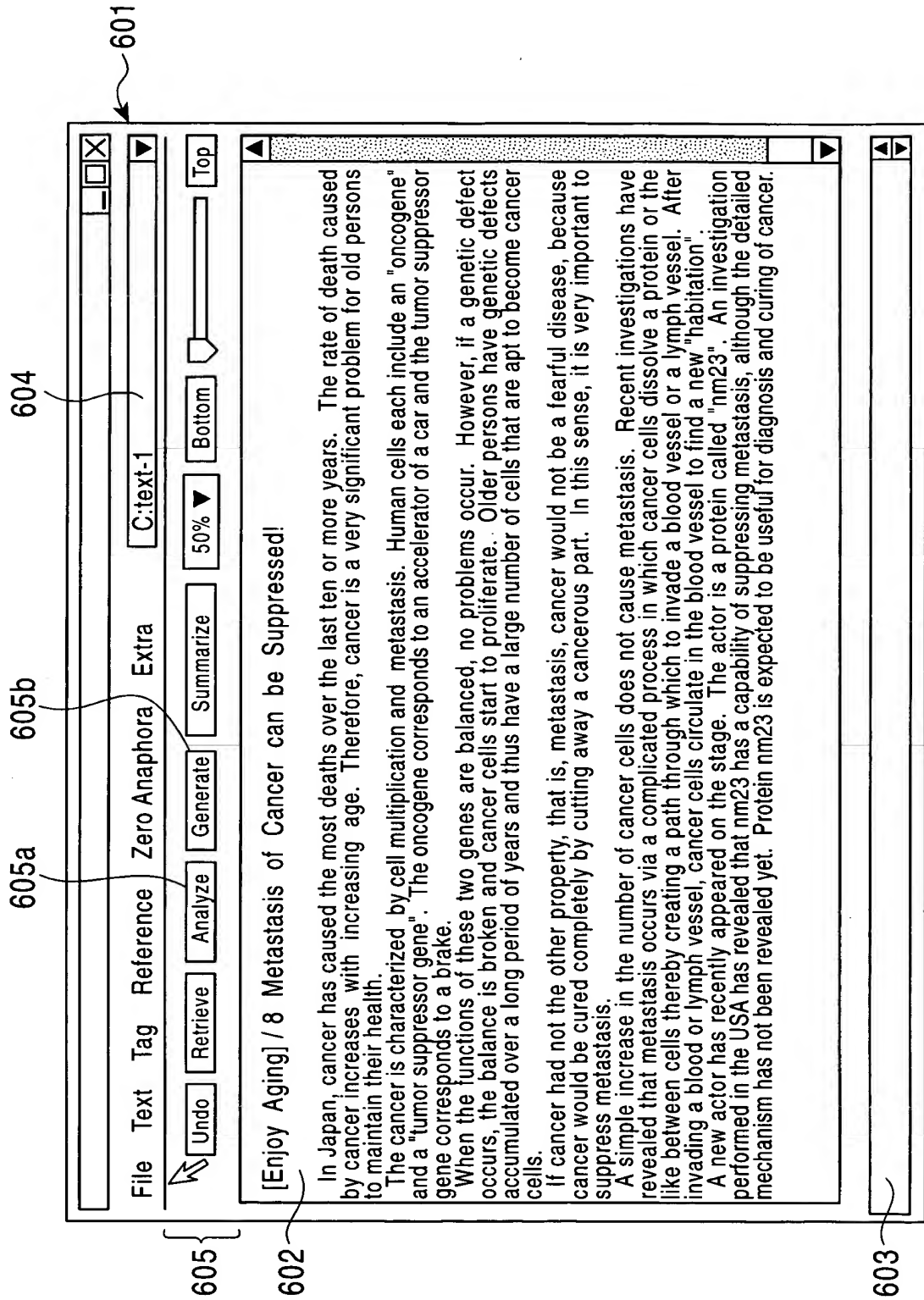


FIG. 30

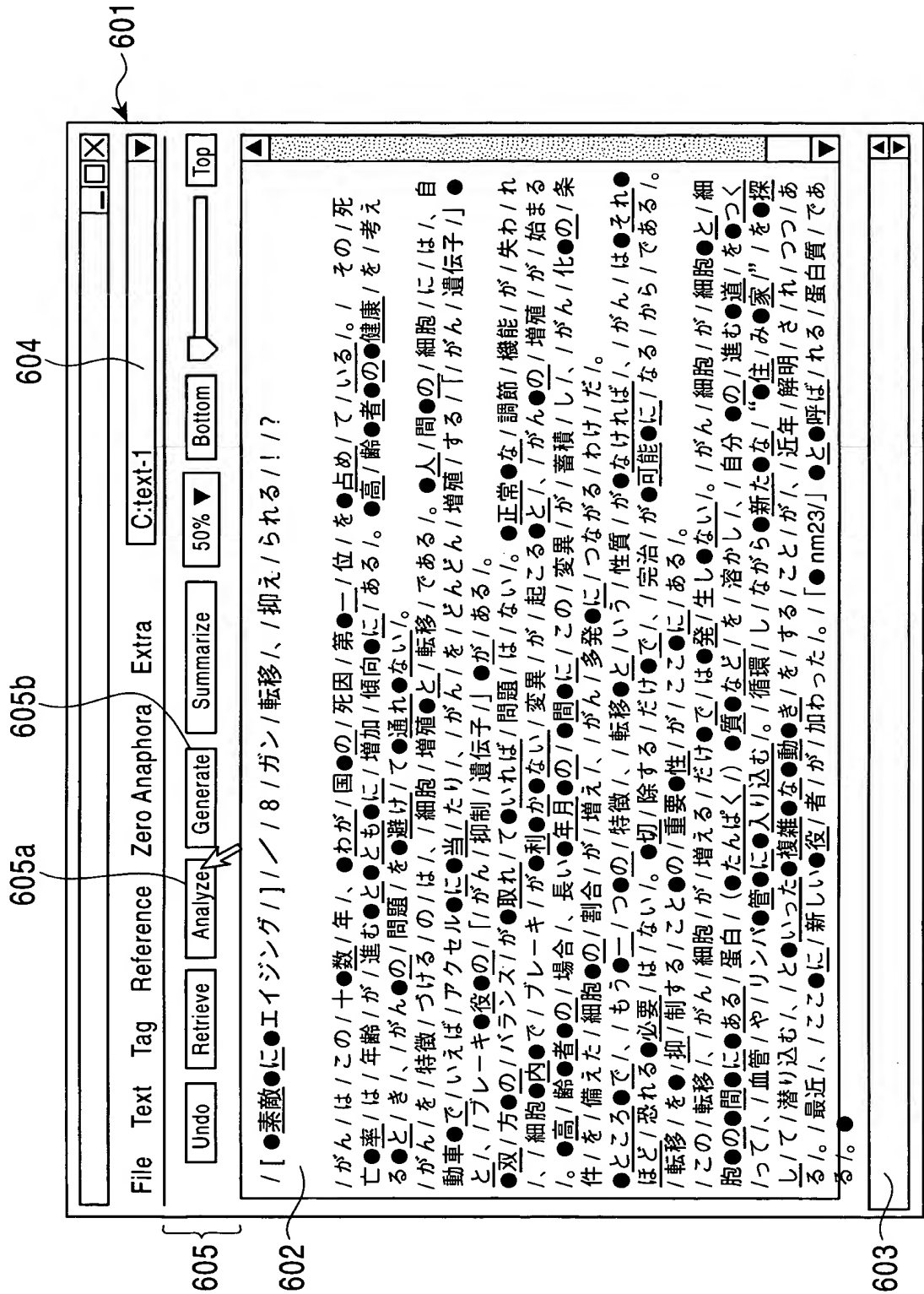


FIG. 31

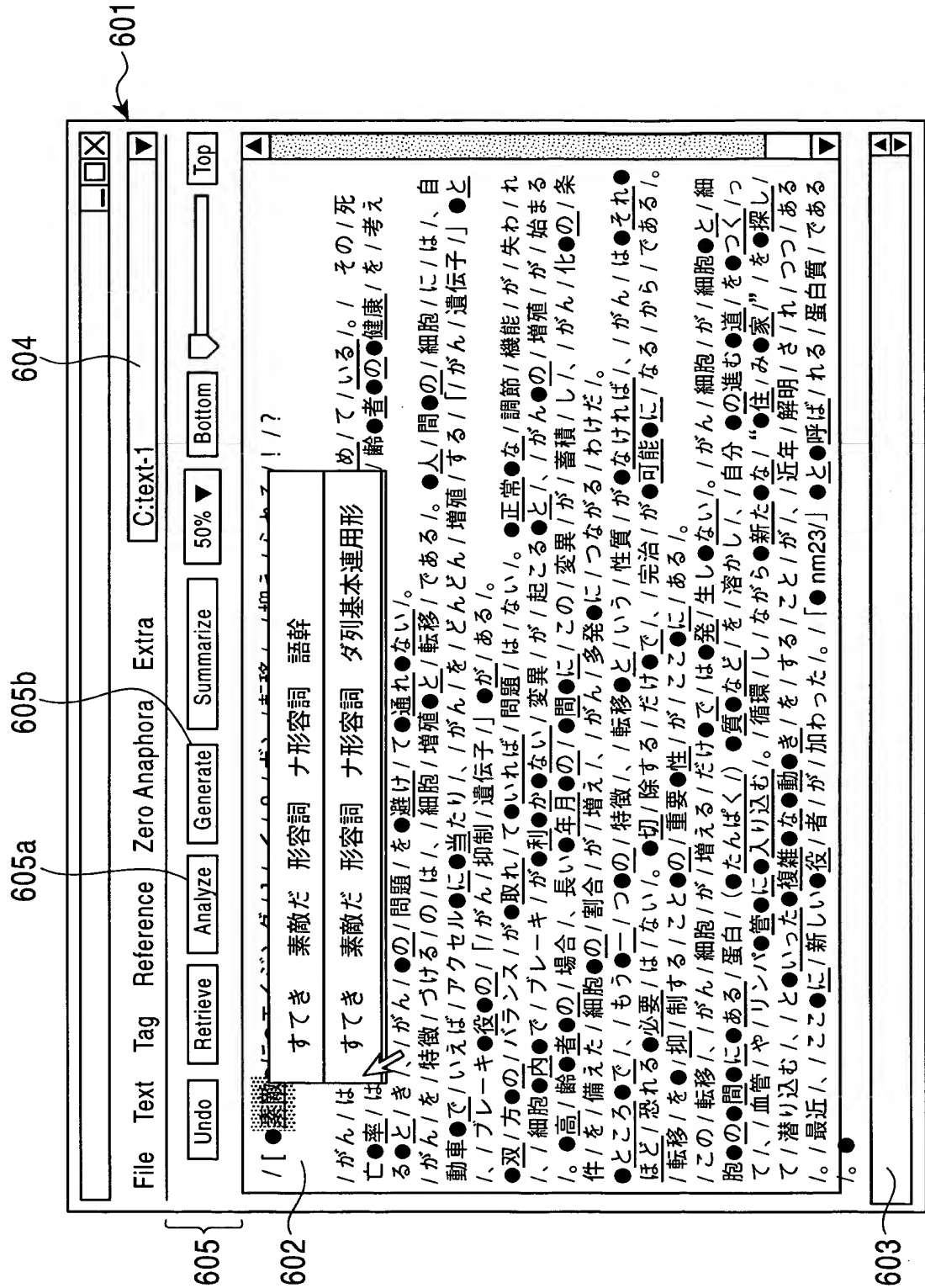


FIG. 32

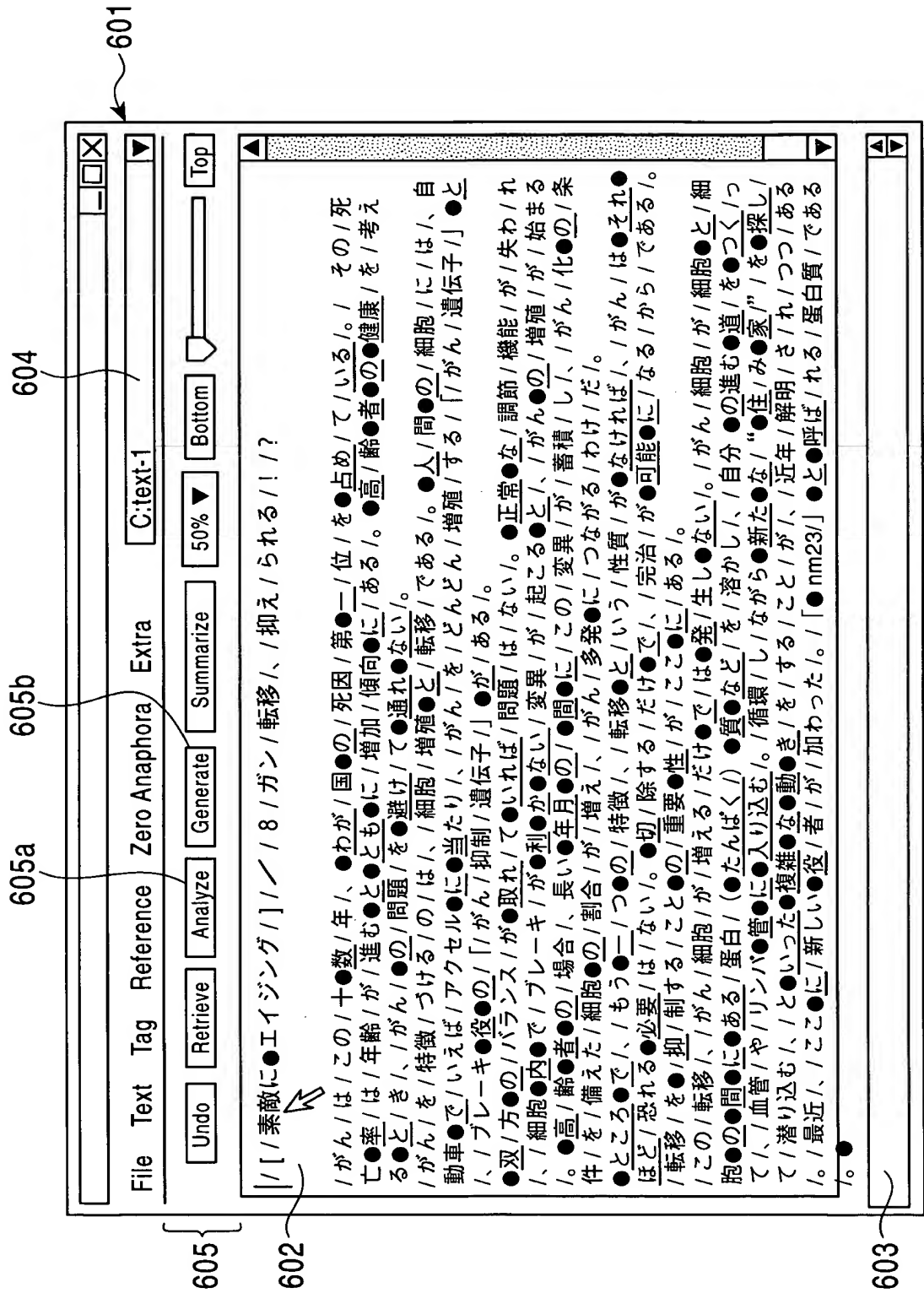


FIG. 34

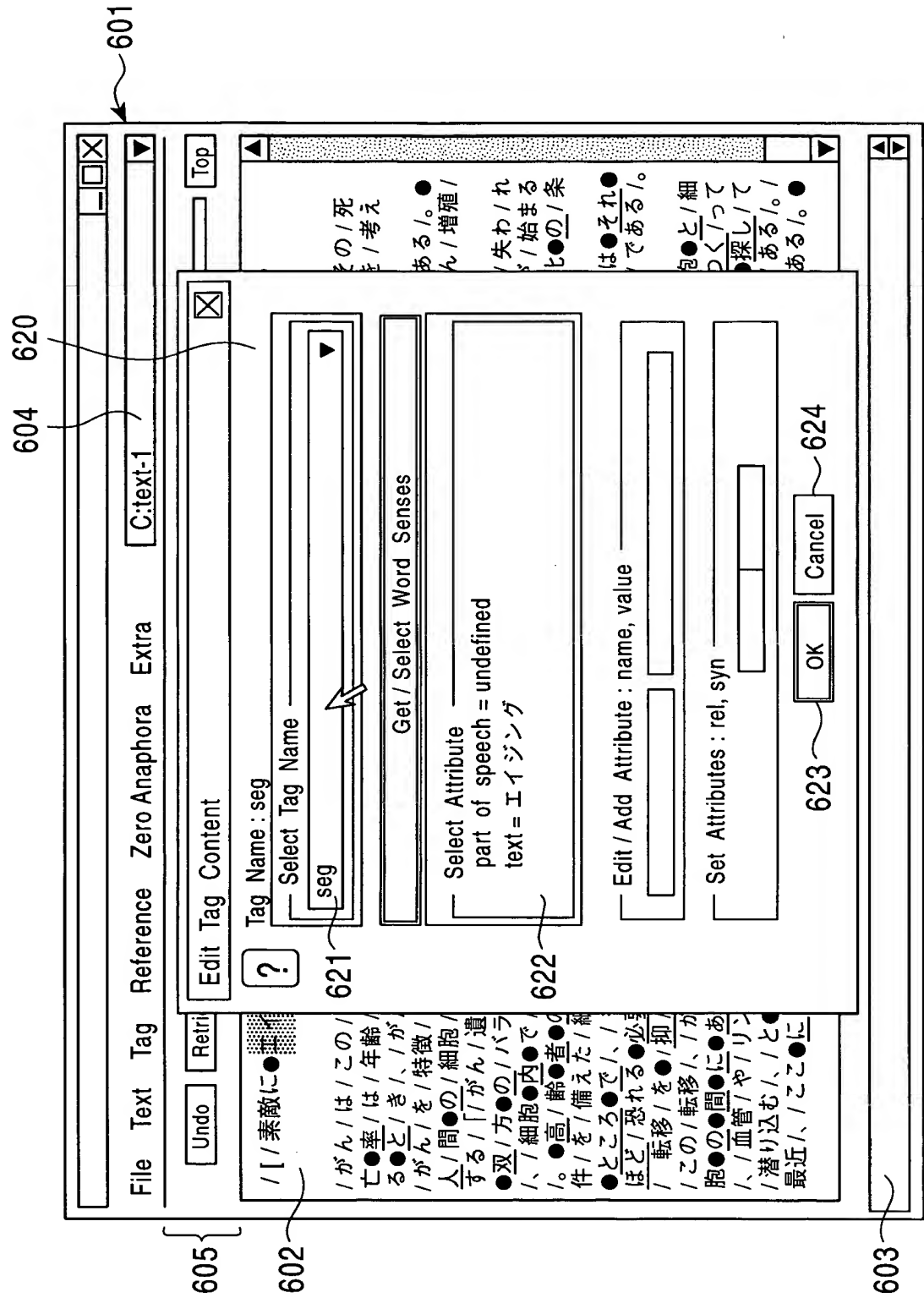


FIG. 35

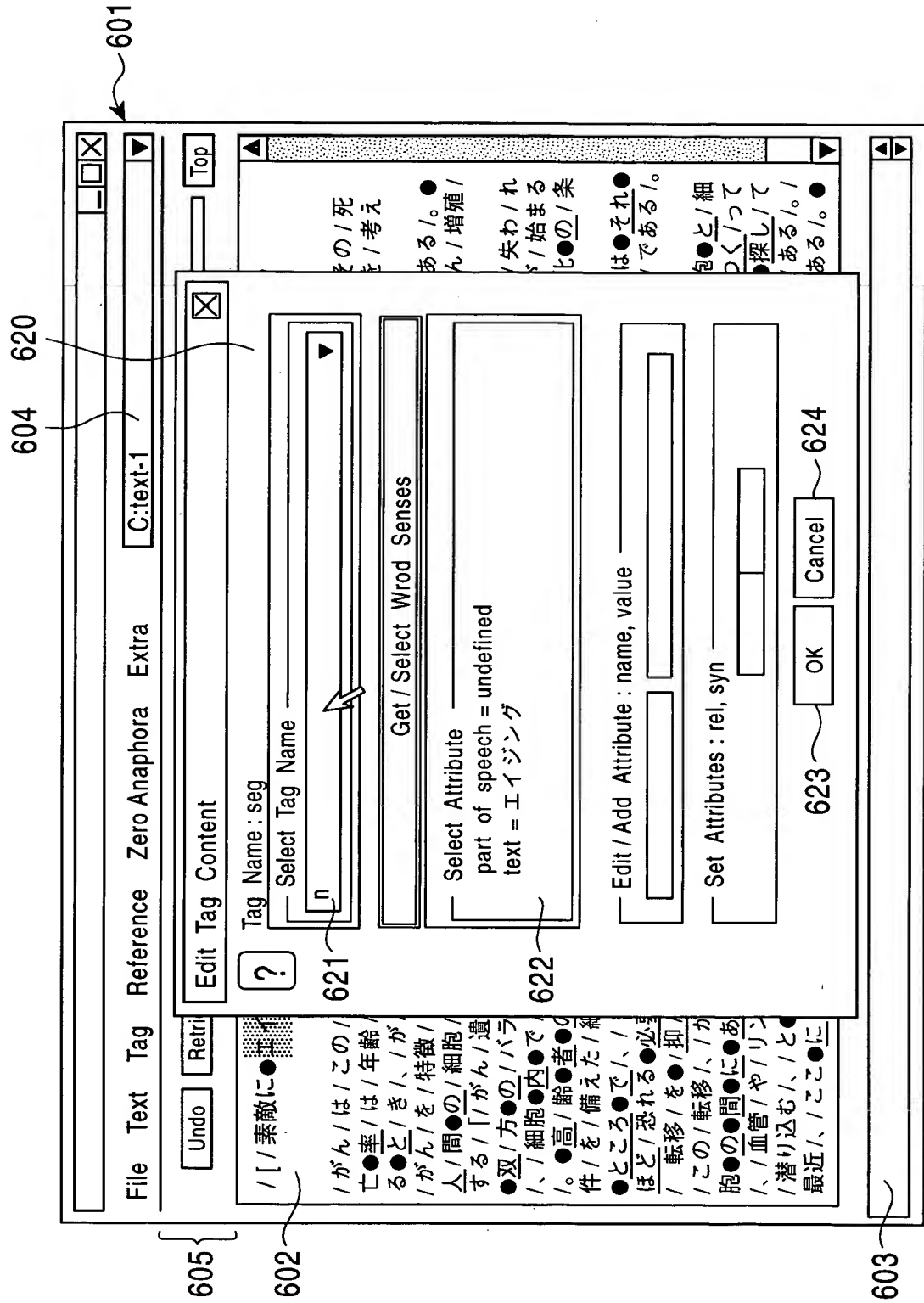


FIG. 36

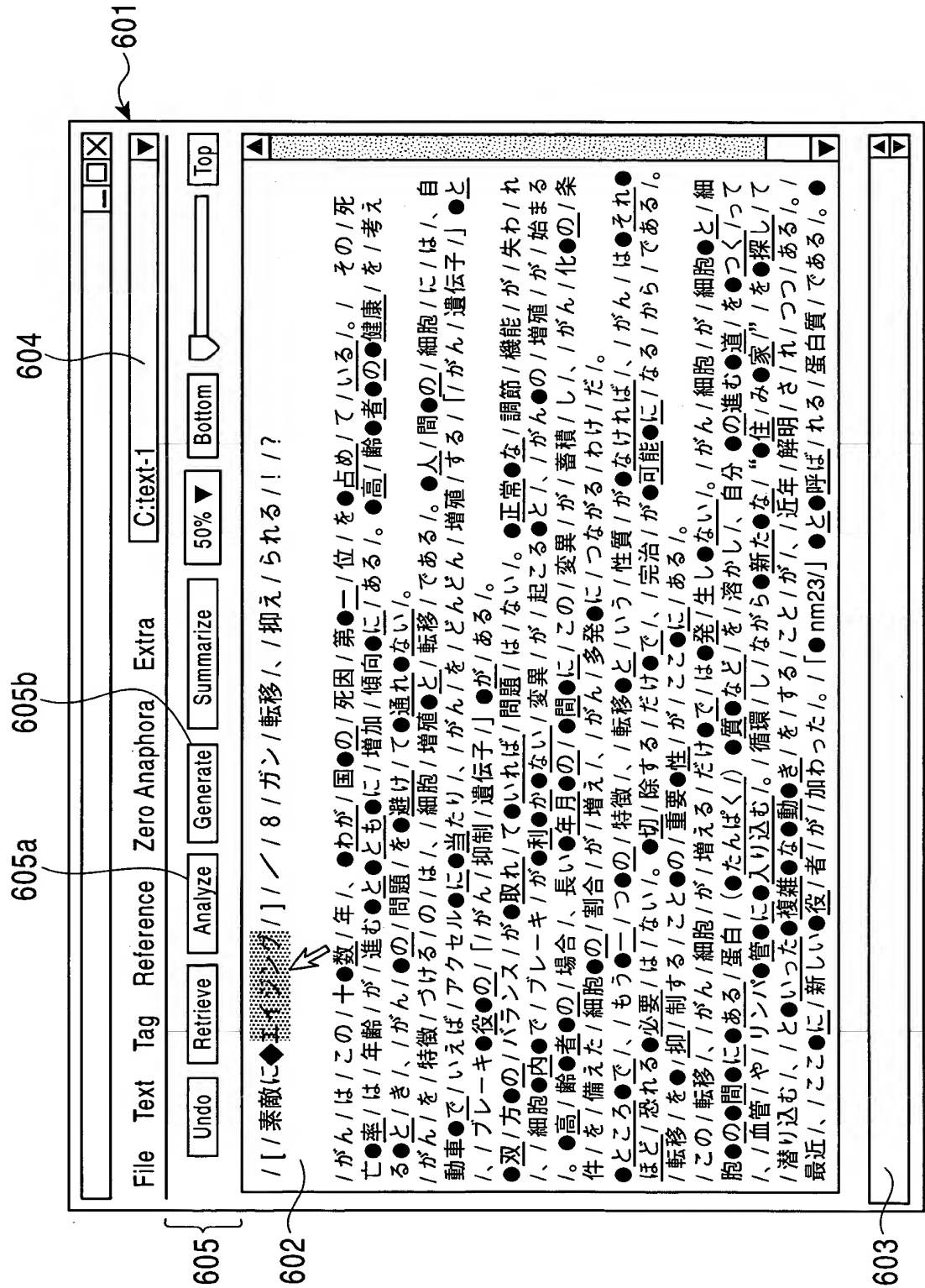


FIG. 37

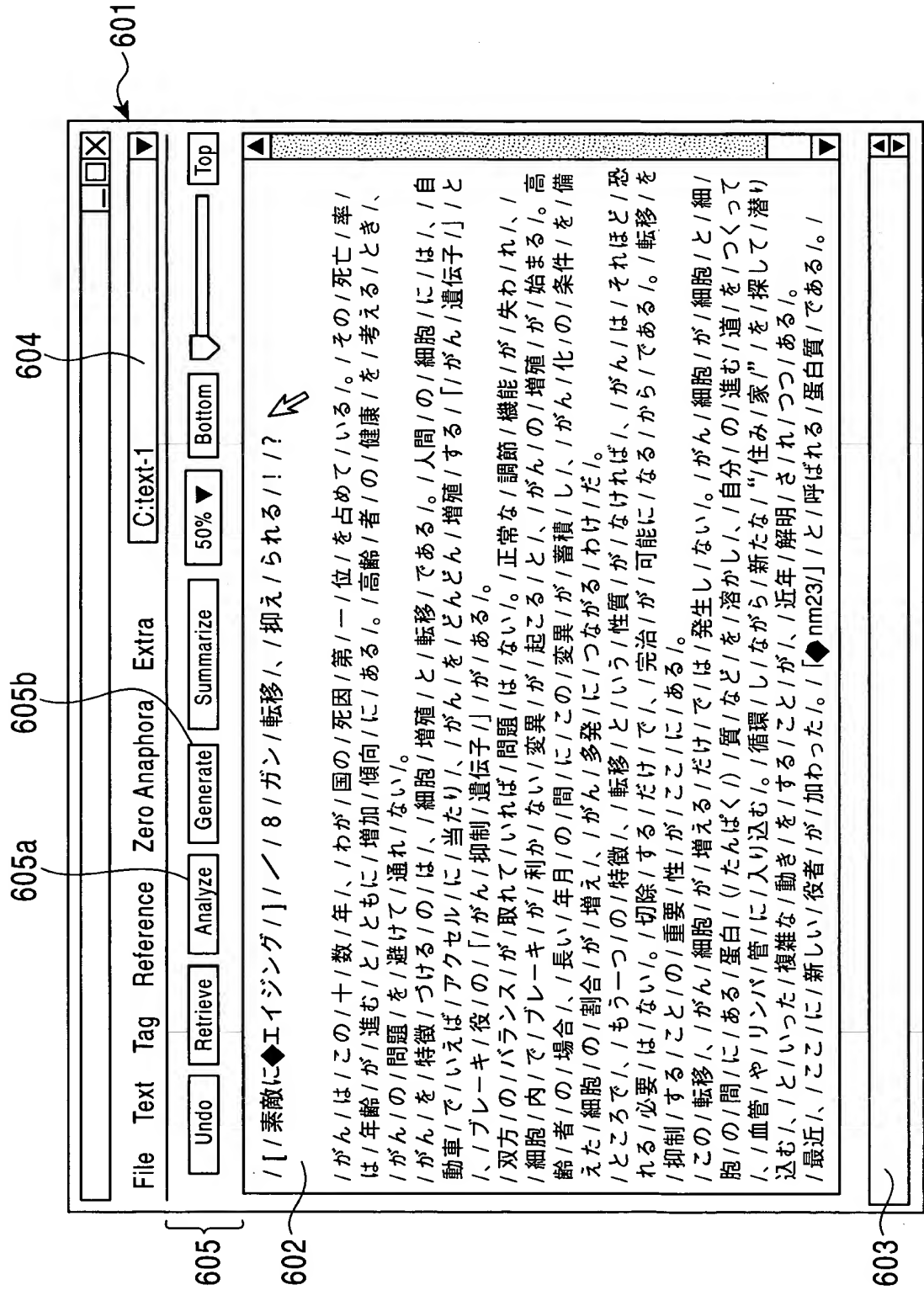
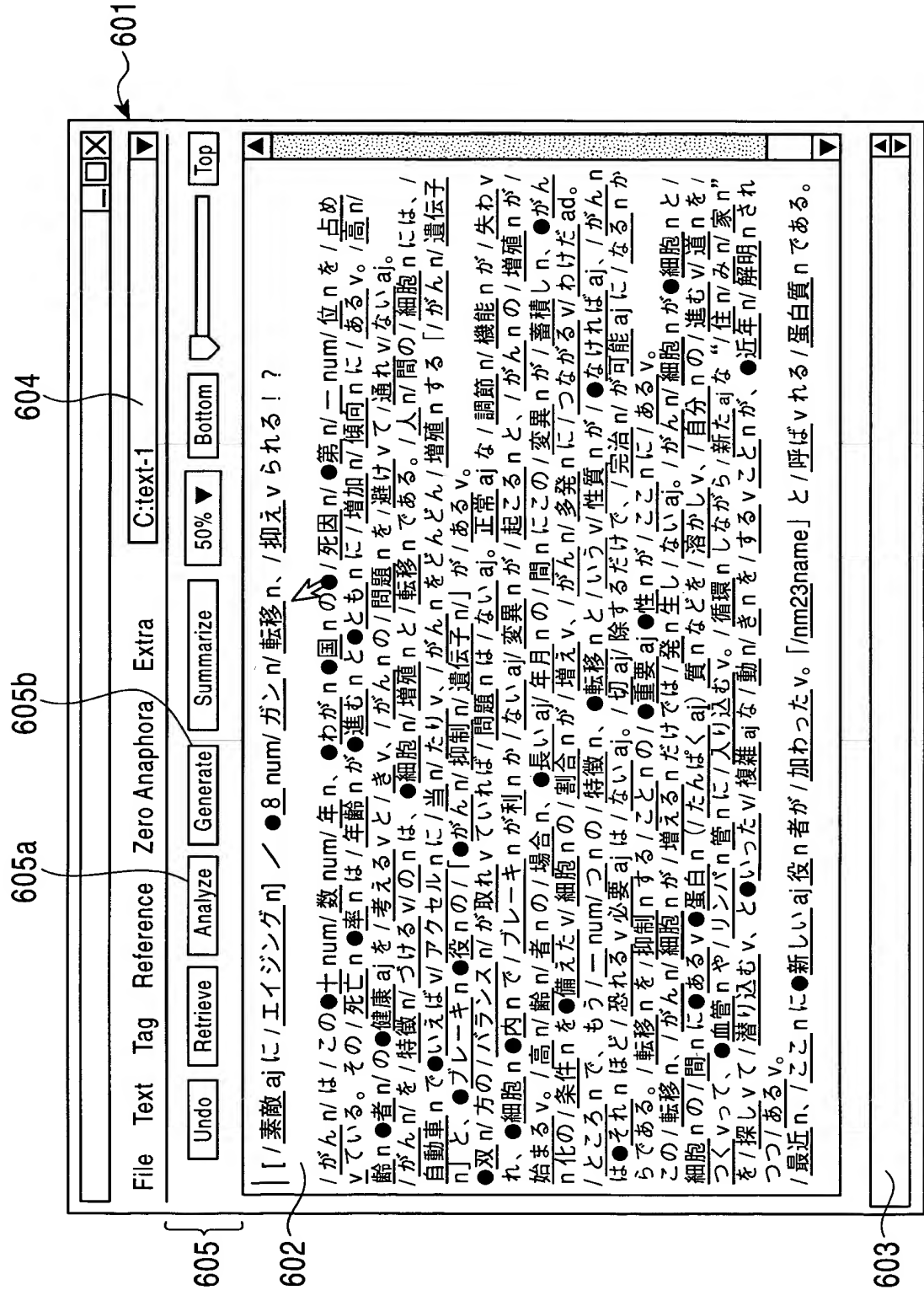


FIG. 38



605a 605b 604

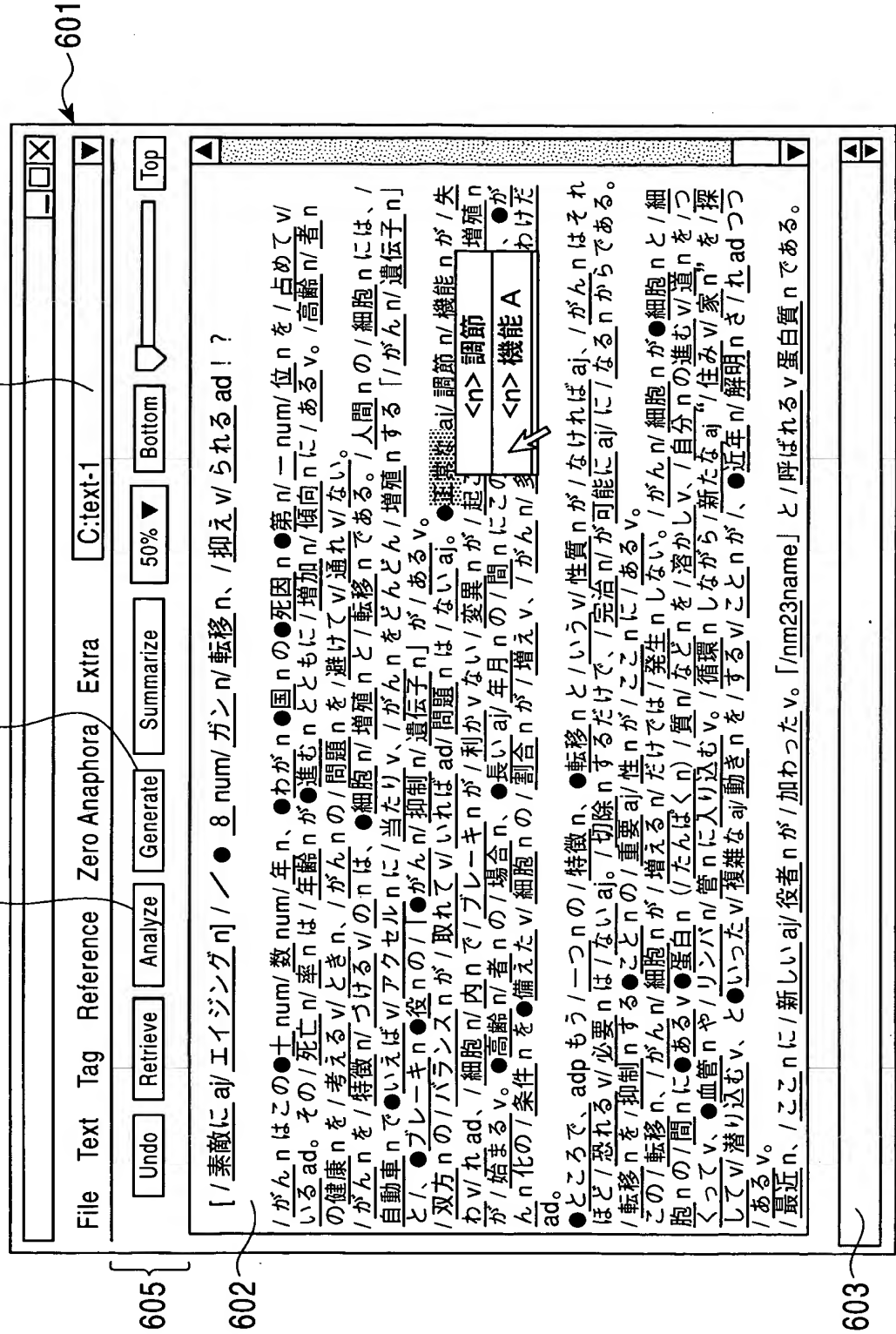


FIG. 40

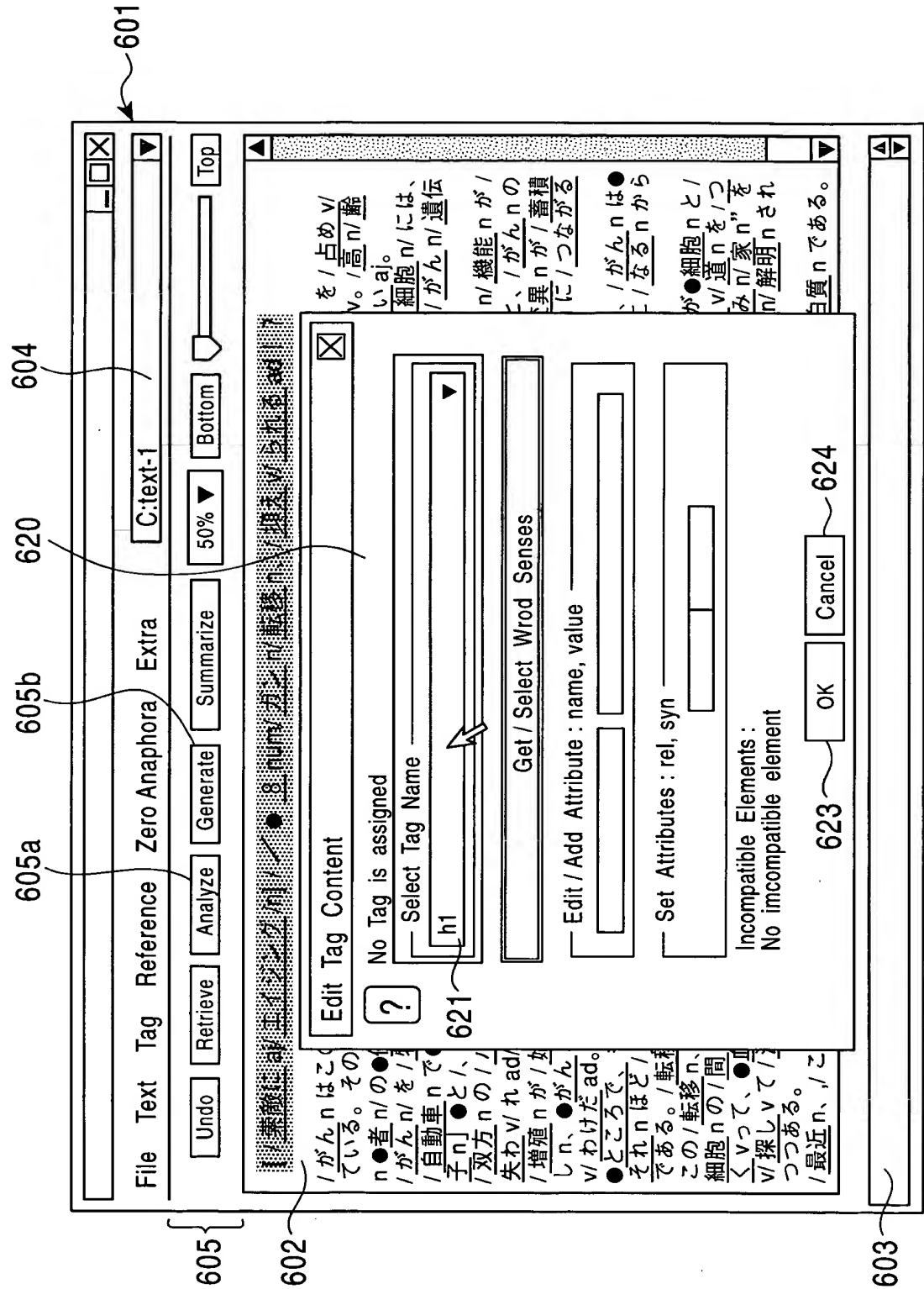


FIG. 41

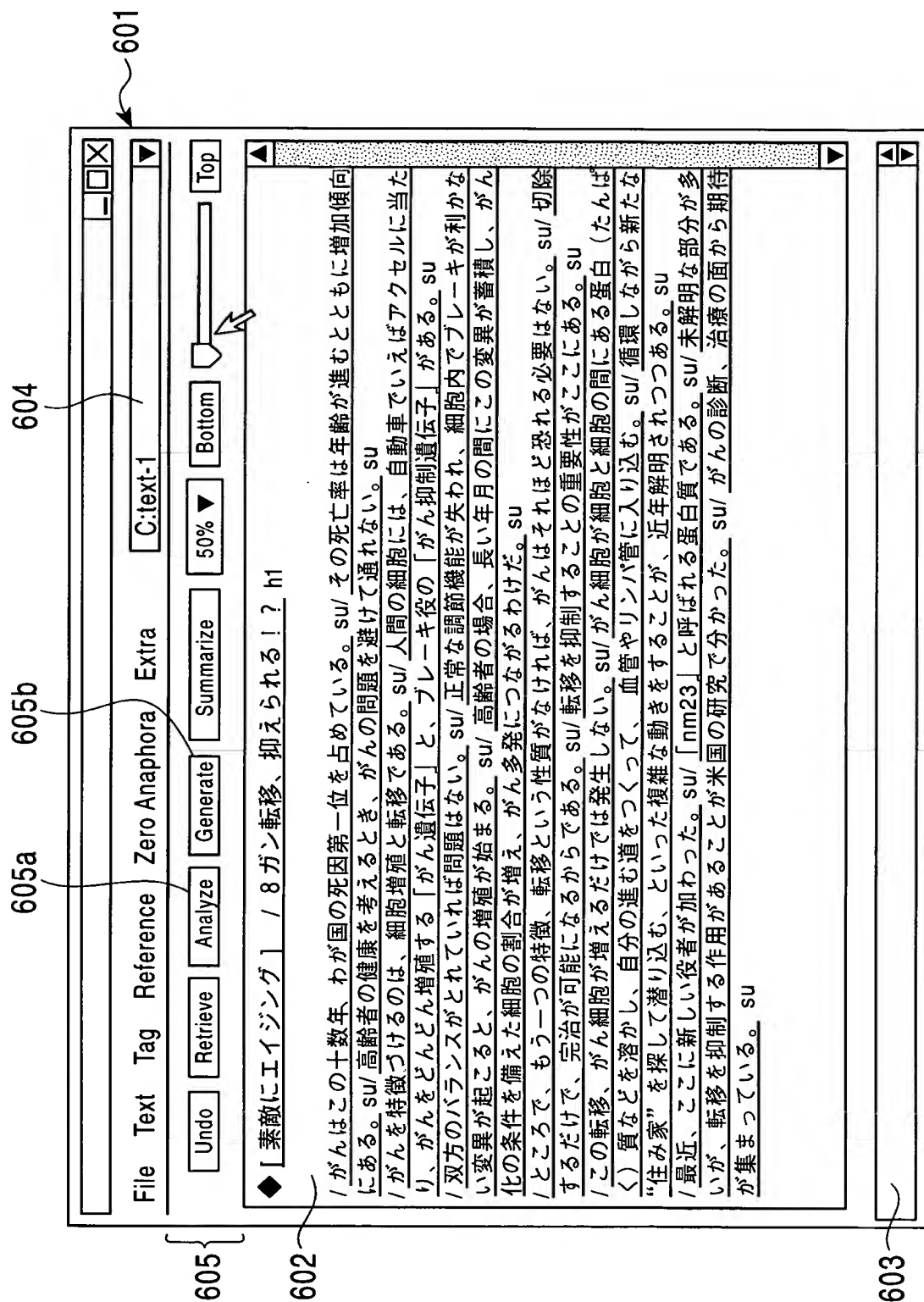


FIG. 42

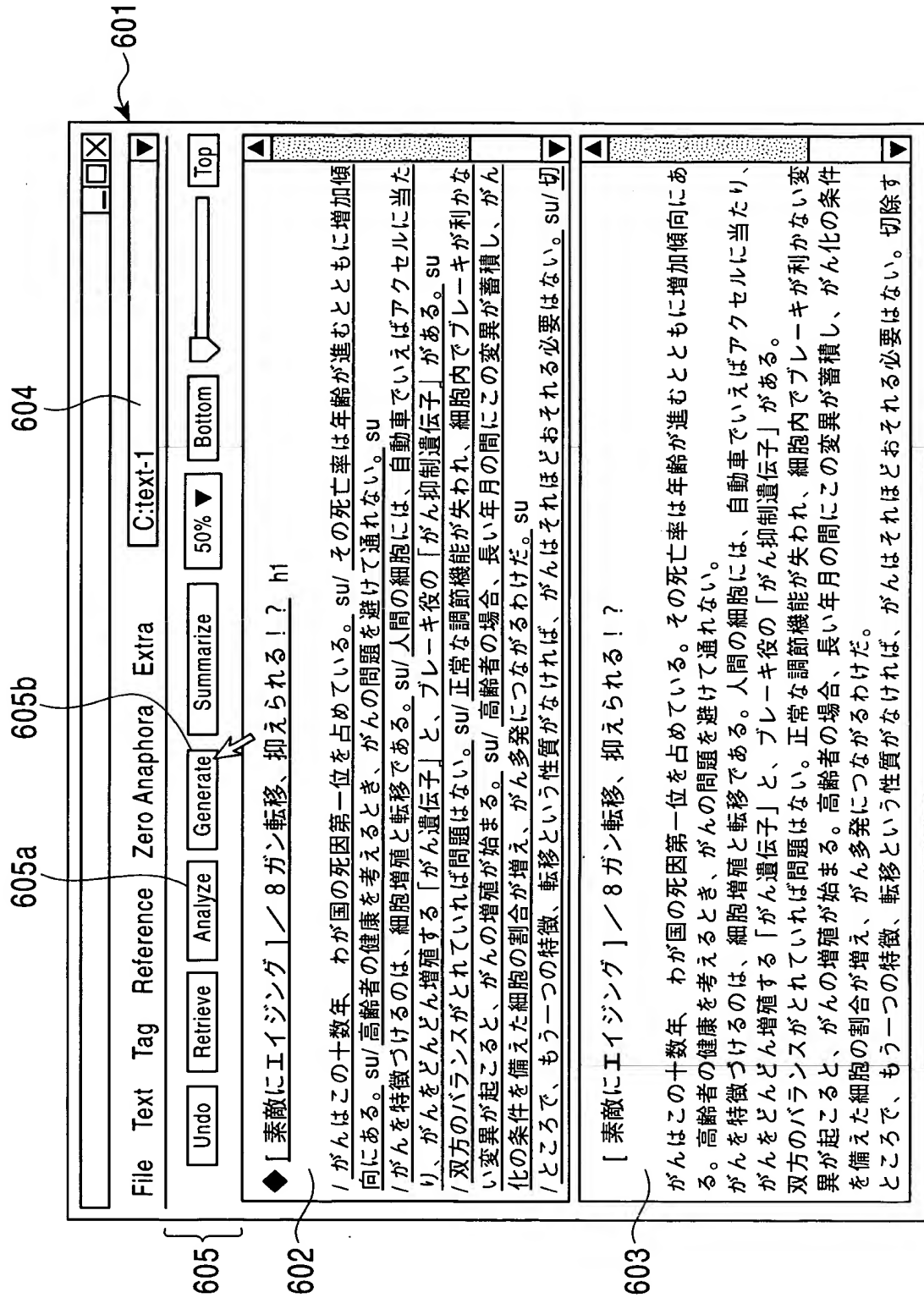


FIG. 43

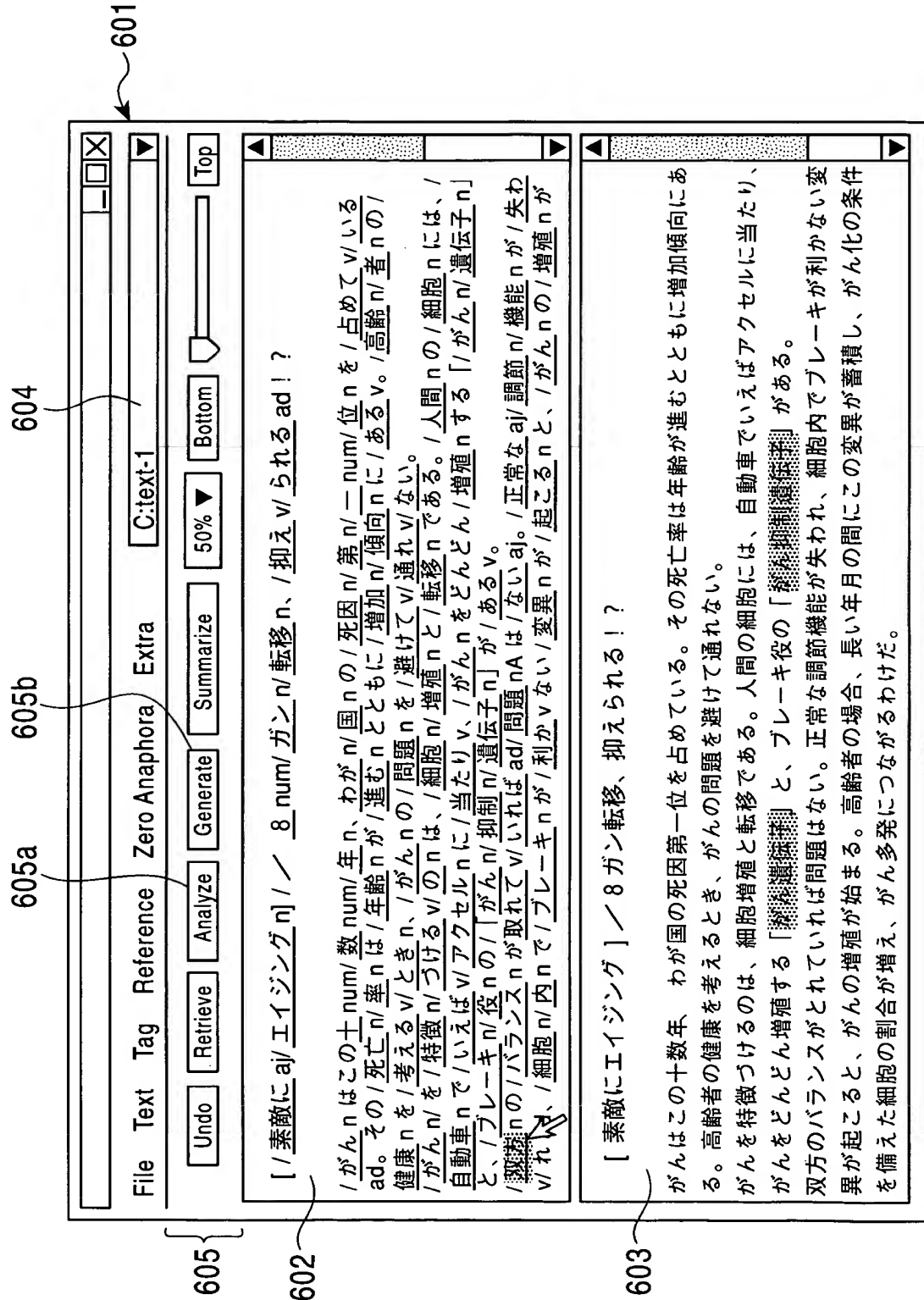


FIG. 44

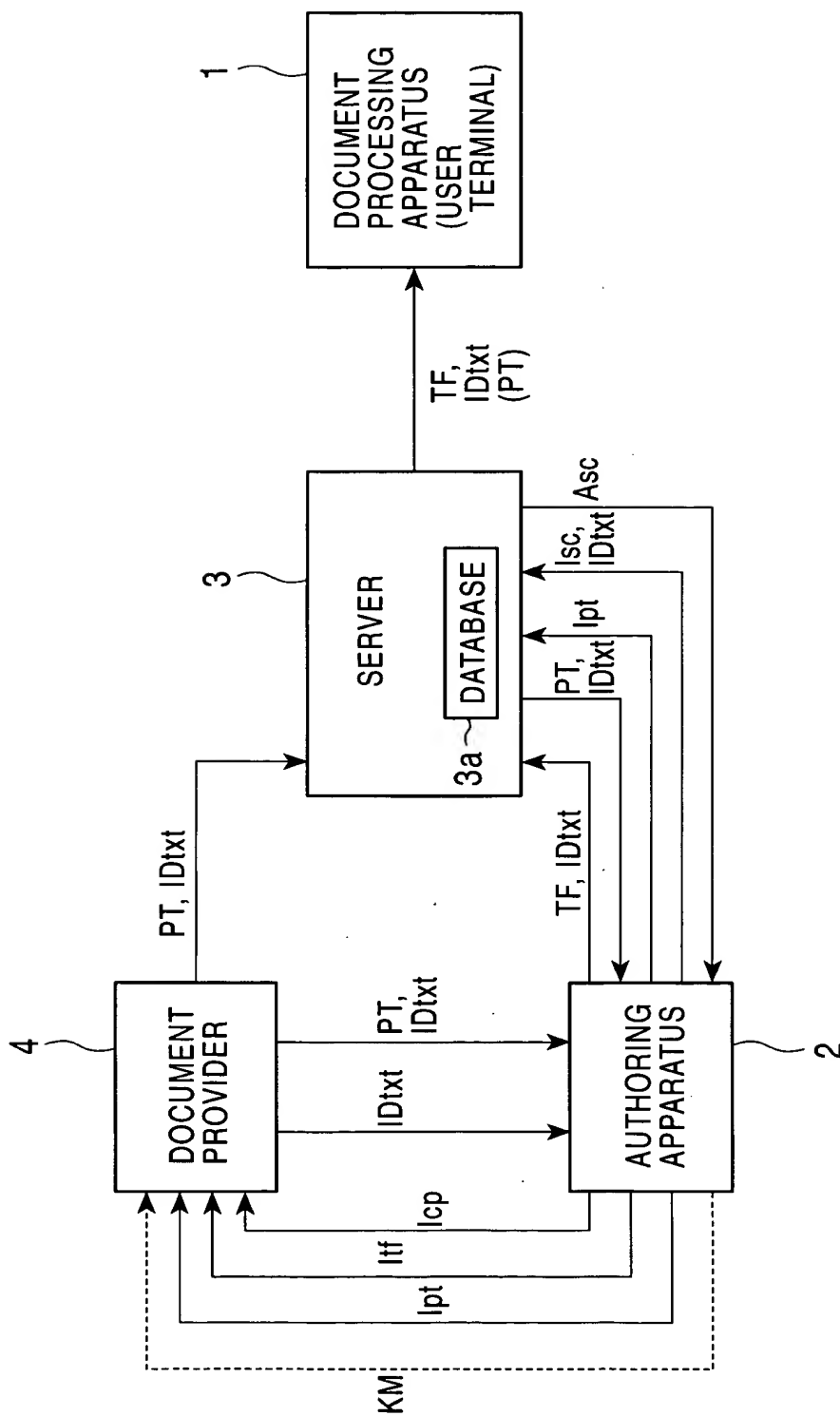


FIG. 45A

IDtxt	PT
-------	----

FIG. 45B

IDtxt	TF
-------	----

FIG. 45C

IDtxt	TF	PT
-------	----	----

FIG. 45D

IDtxt	IDtf	TF
-------	------	----

FIG. 45E

IDtxt	IDtf	TF	PT
-------	------	----	----

FIG. 45A

FIG. 46

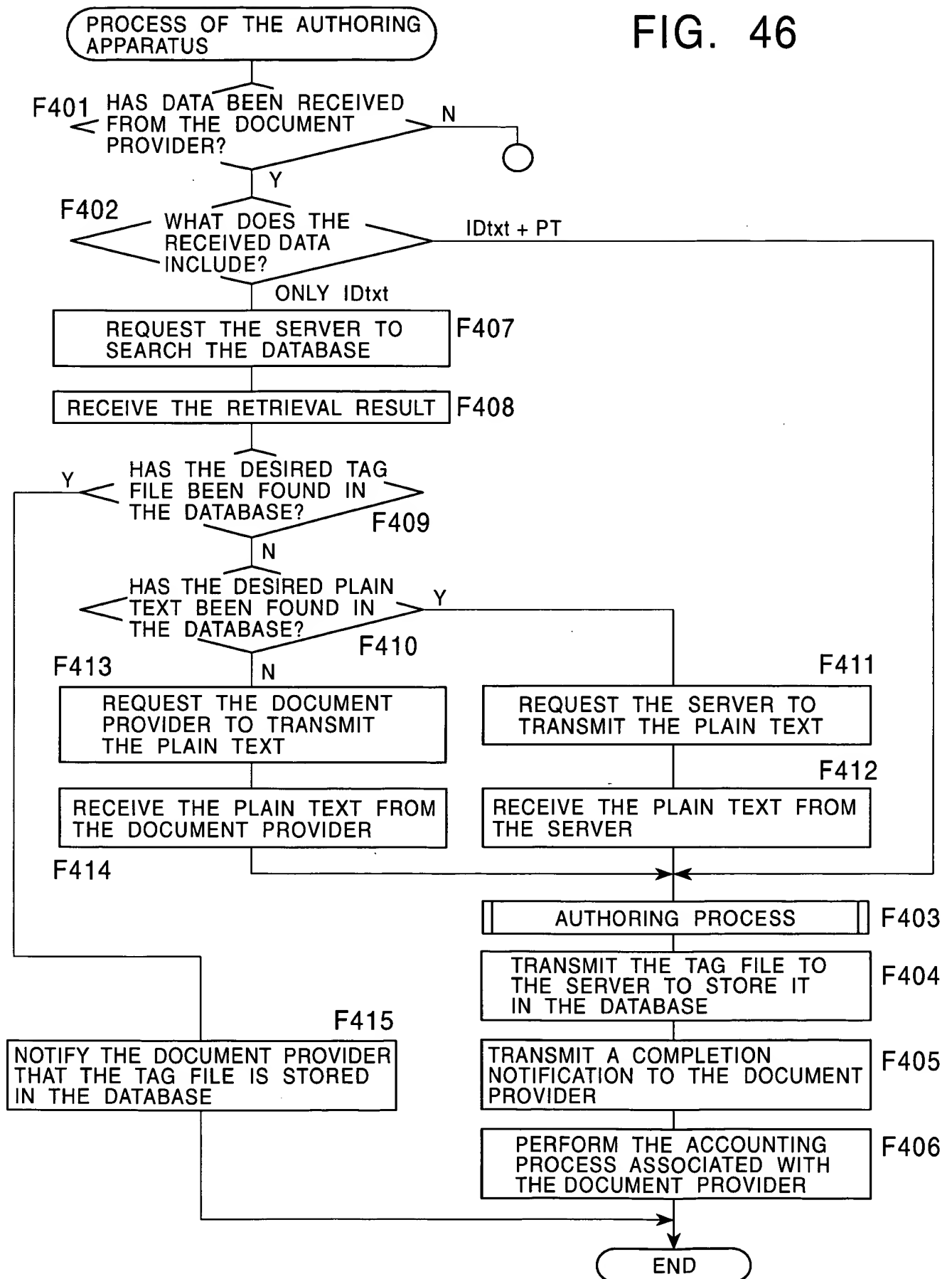


FIG. 47

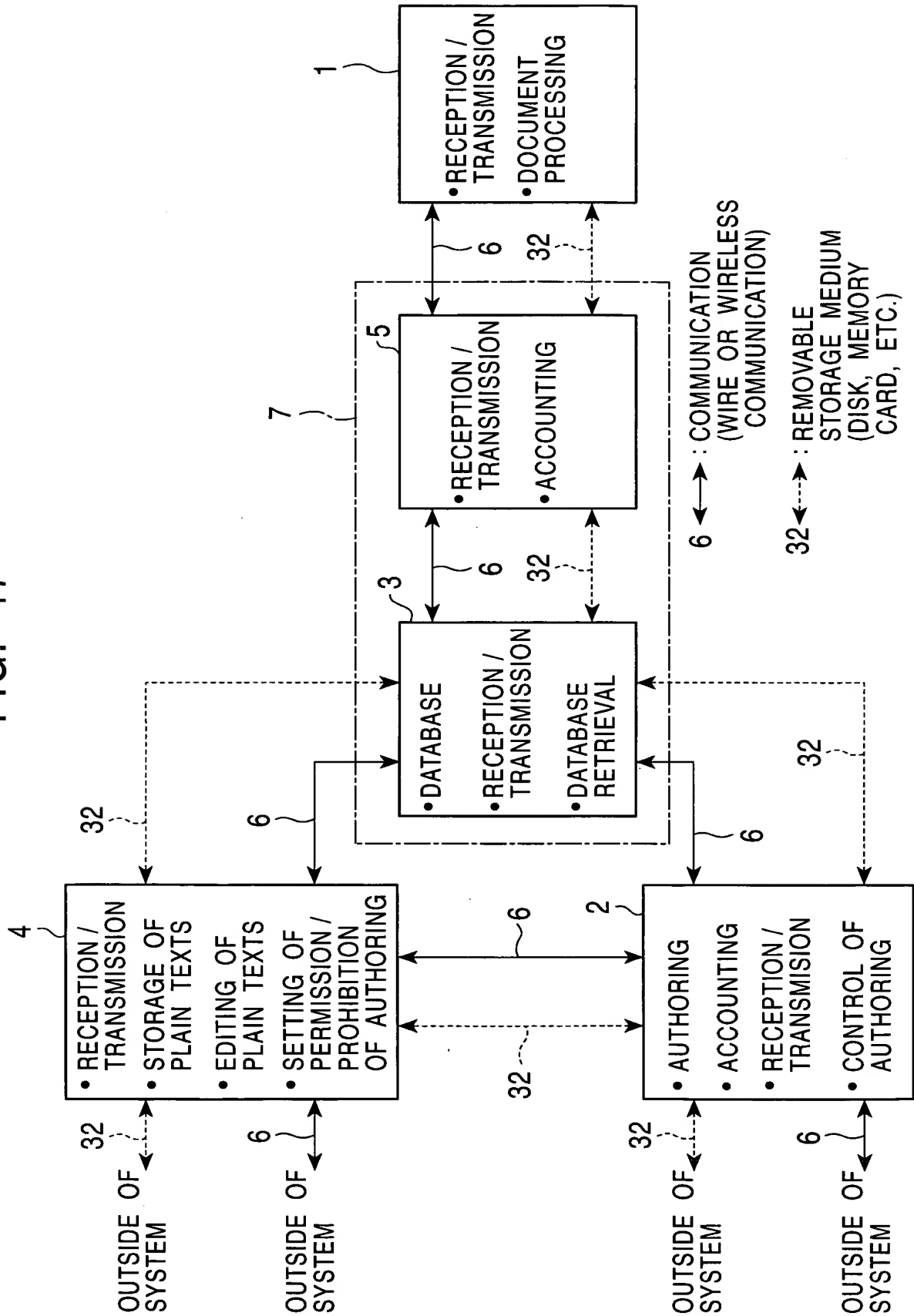


FIG. 48

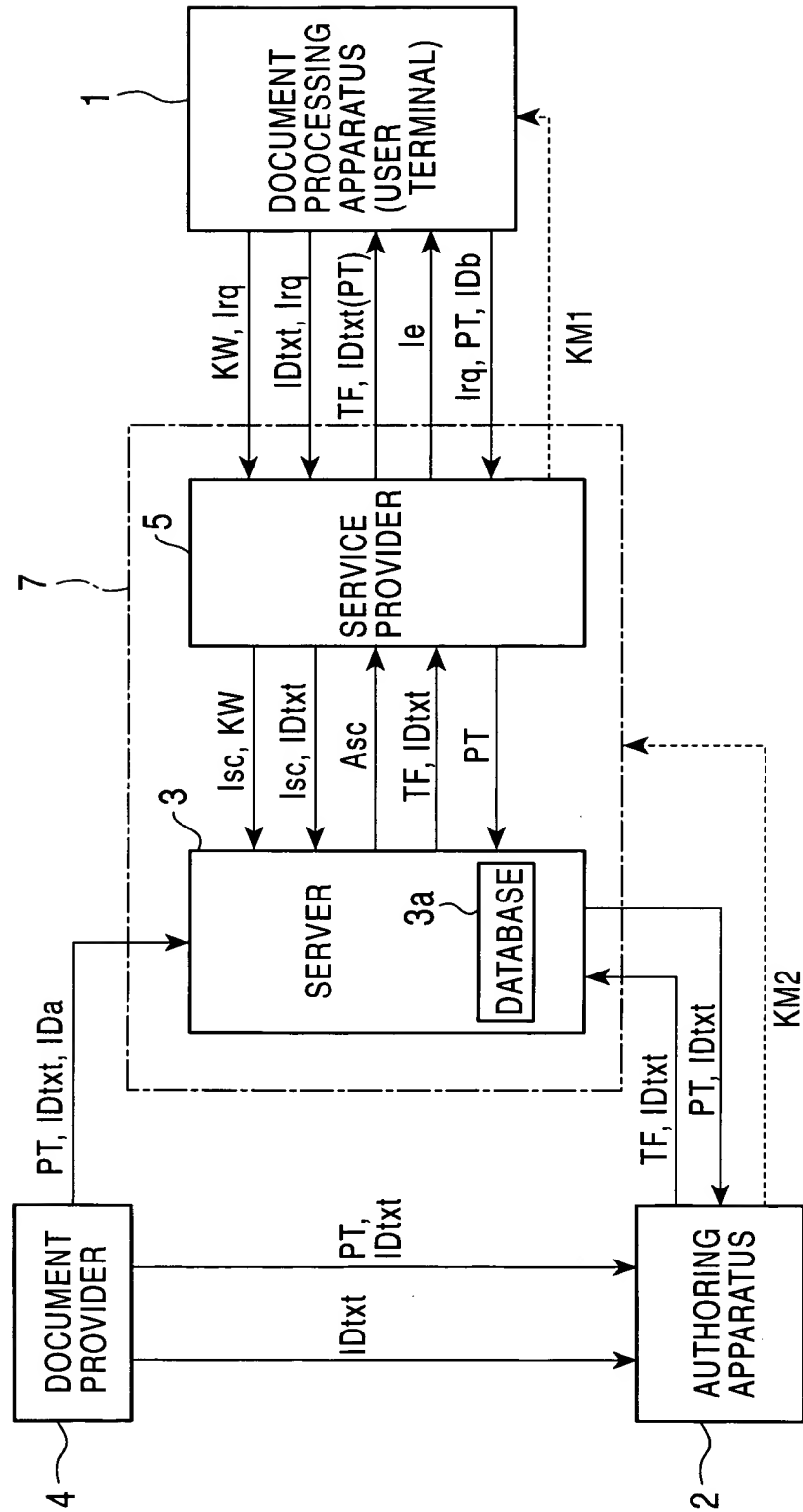


FIG. 49A

IDtxt	IDtf	PT
-------	------	----

FIG. 49B

IDtxt	TF
-------	----

FIG. 49C

IDtxt	TF	PT
-------	----	----

FIG. 49D

IDtxt	IDtf	TF
-------	------	----

FIG. 49E

IDtxt	IDtf	TF	PT
-------	------	----	----

FIG. 50

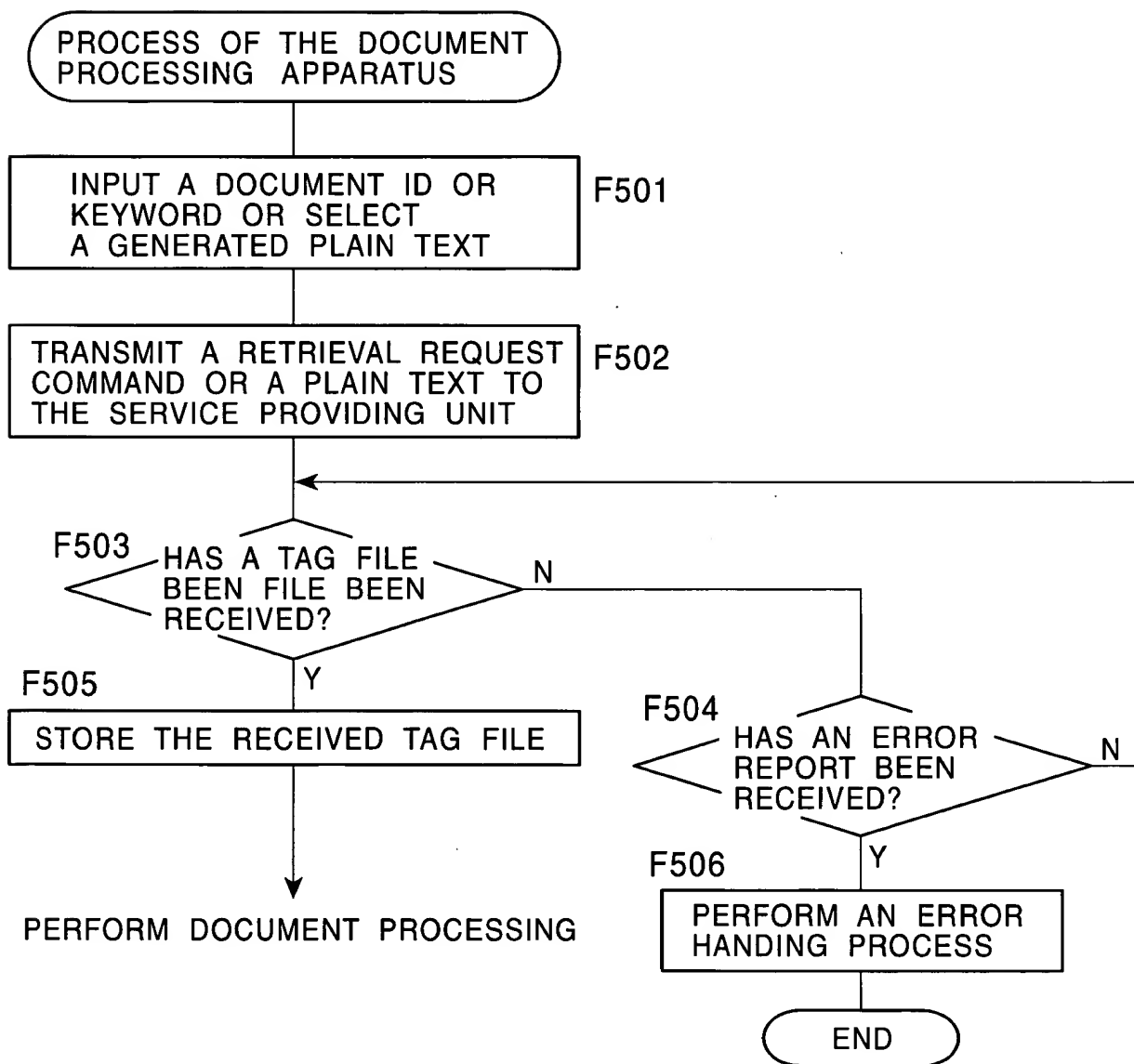


FIG. 51

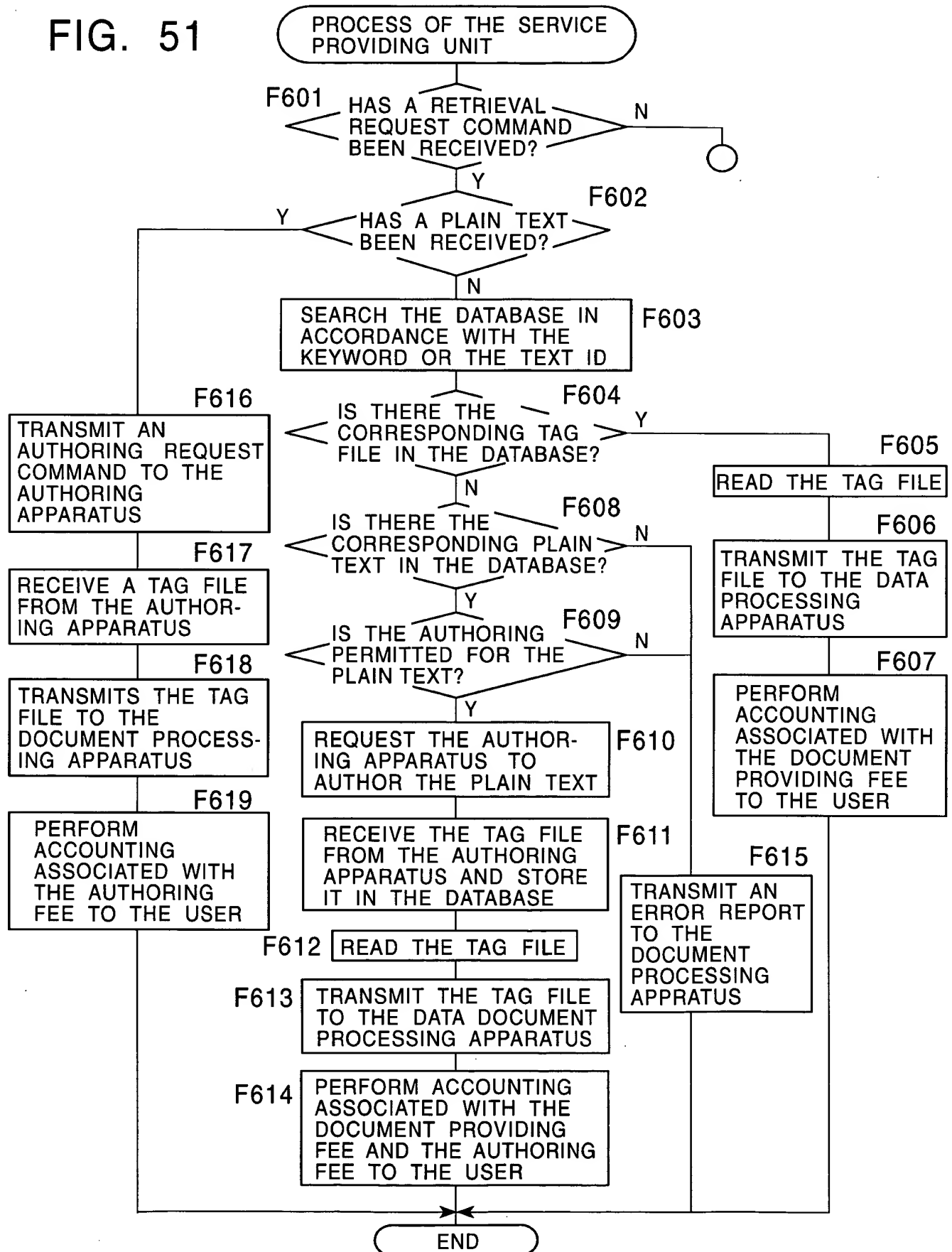


FIG. 52

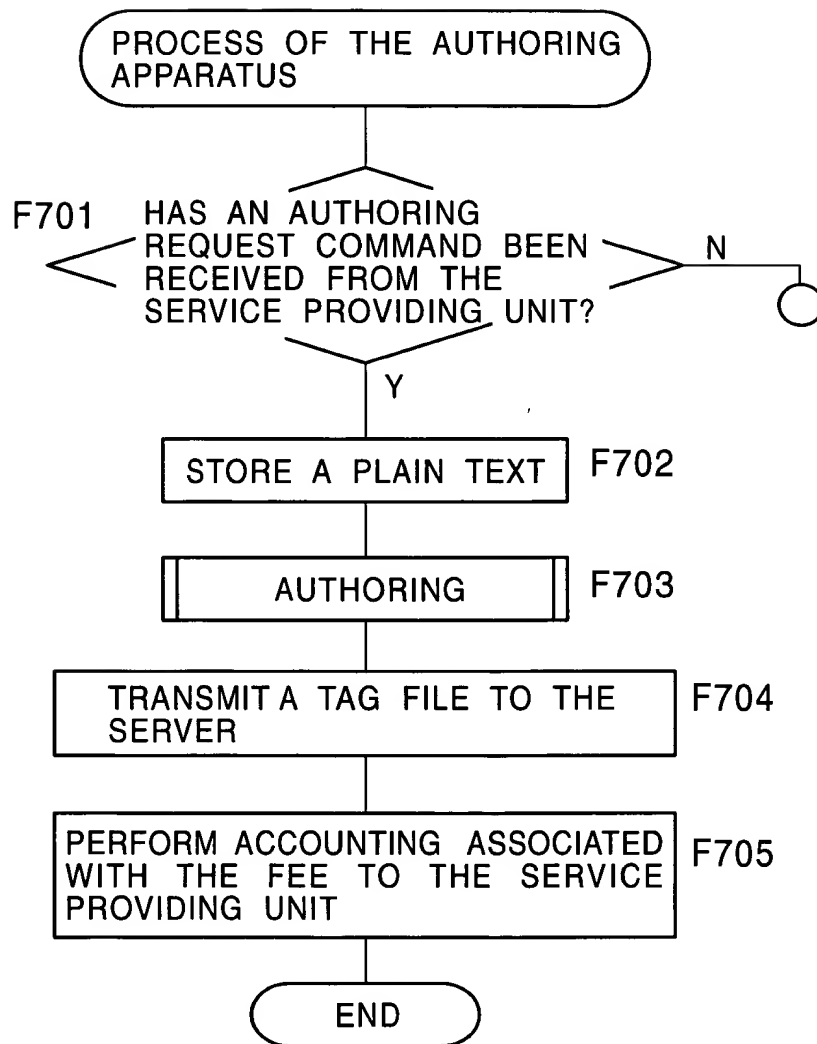


FIG. 53

250

[SPECIFY A DOCUMENT OR INPUT RETRIEVAL KEYWORDS]
254

DOCUMENT ID

KEYWORD 1

KEYWORD 2

KEYWORD 3

251 {

☐ AND ☒ OR

☐ AND ☐ OR

☐ AND ☐ OR

☐ AND ☐ OR

253 }

SPECIFY THE RANGE
OF YEAR, MONTH
AND DATE

Do

Cancel

256 ~

257

FIG. 54

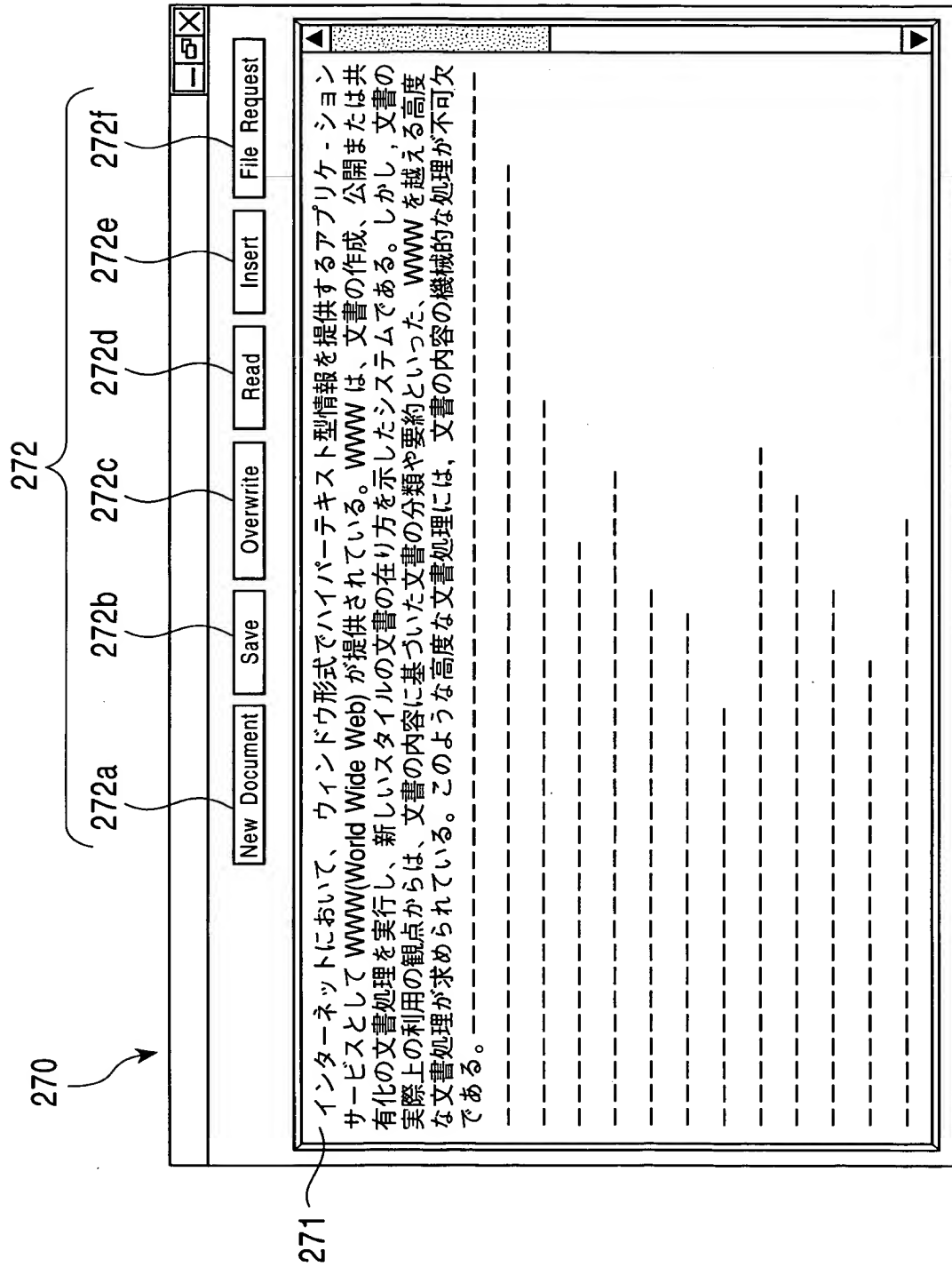


FIG. 55

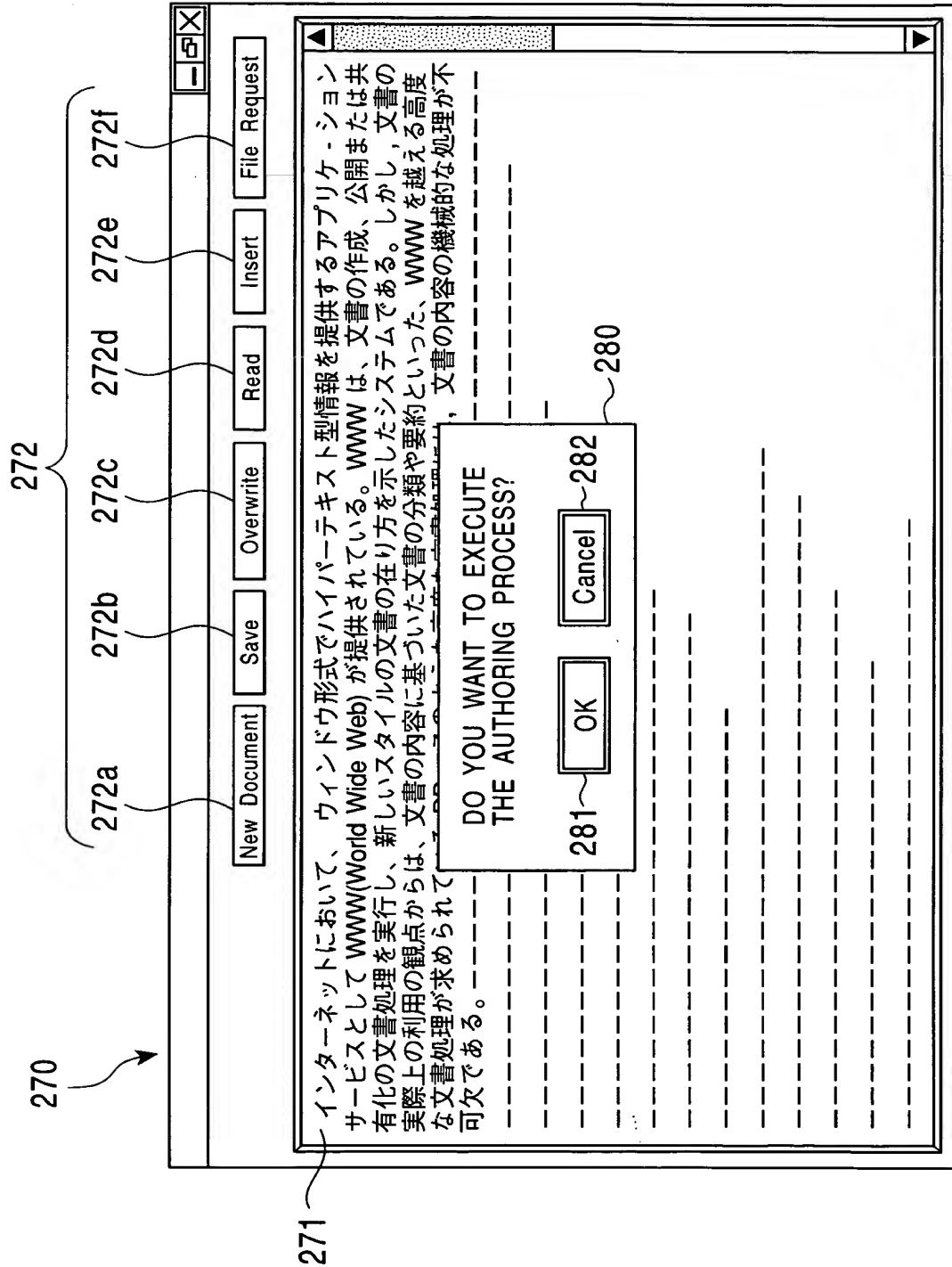


FIG. 56

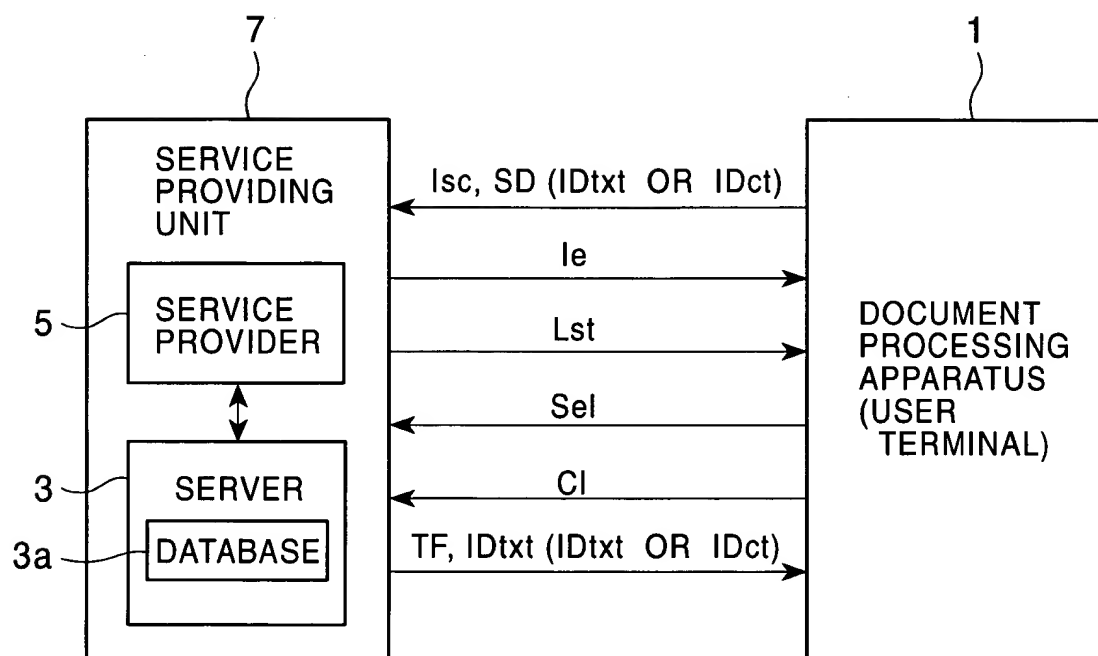


FIG. 57

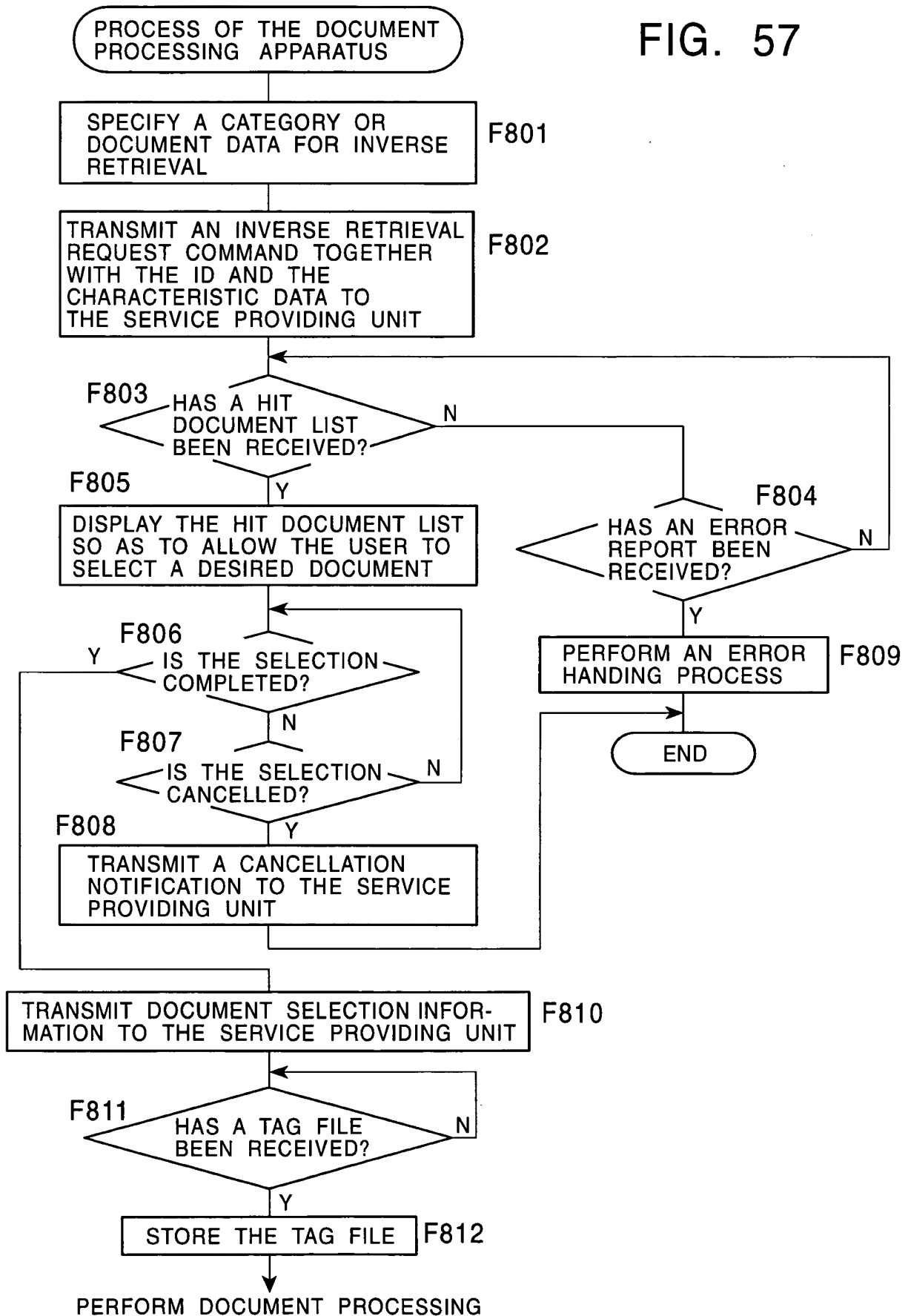


FIG. 58

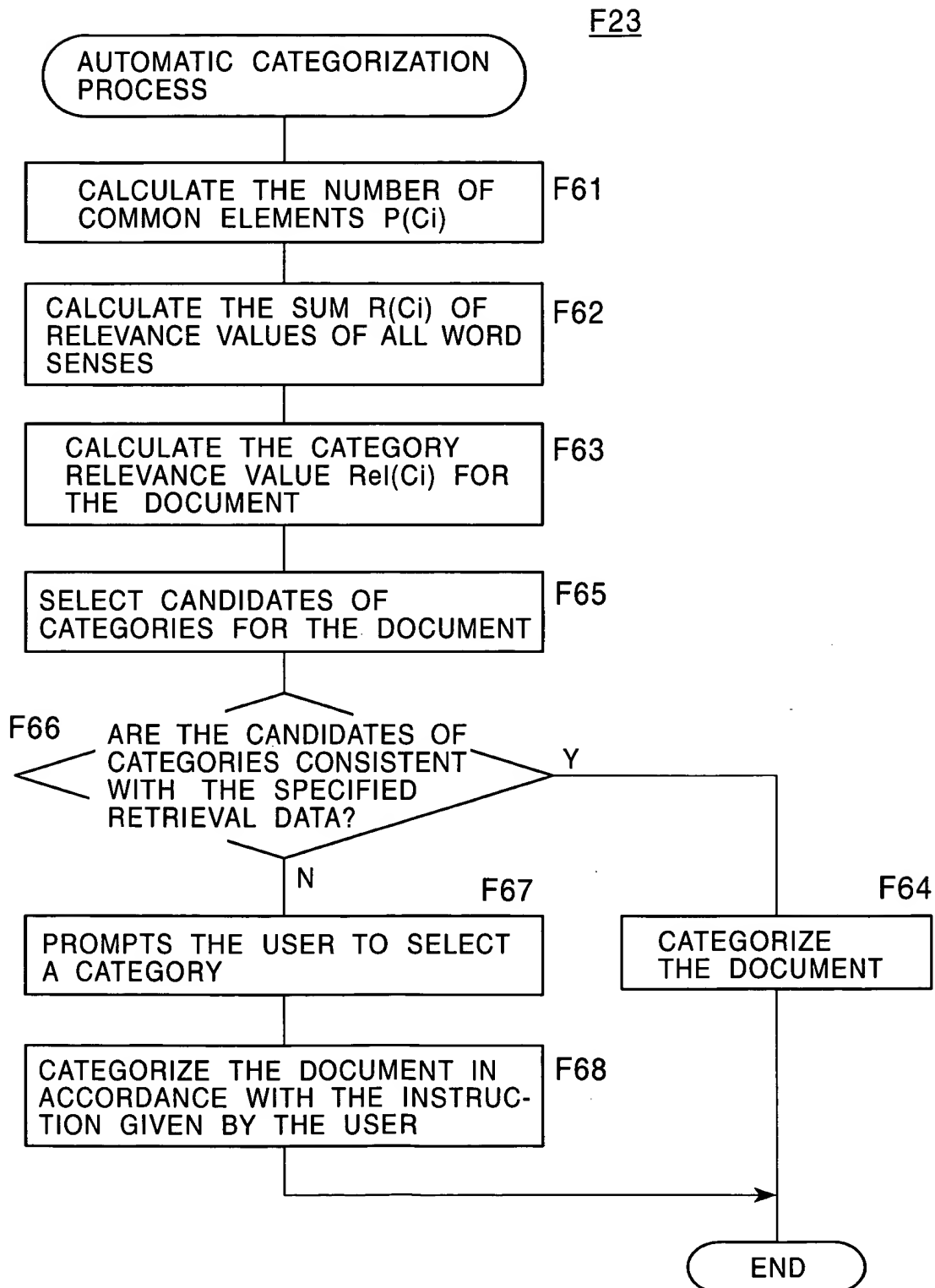


FIG. 59

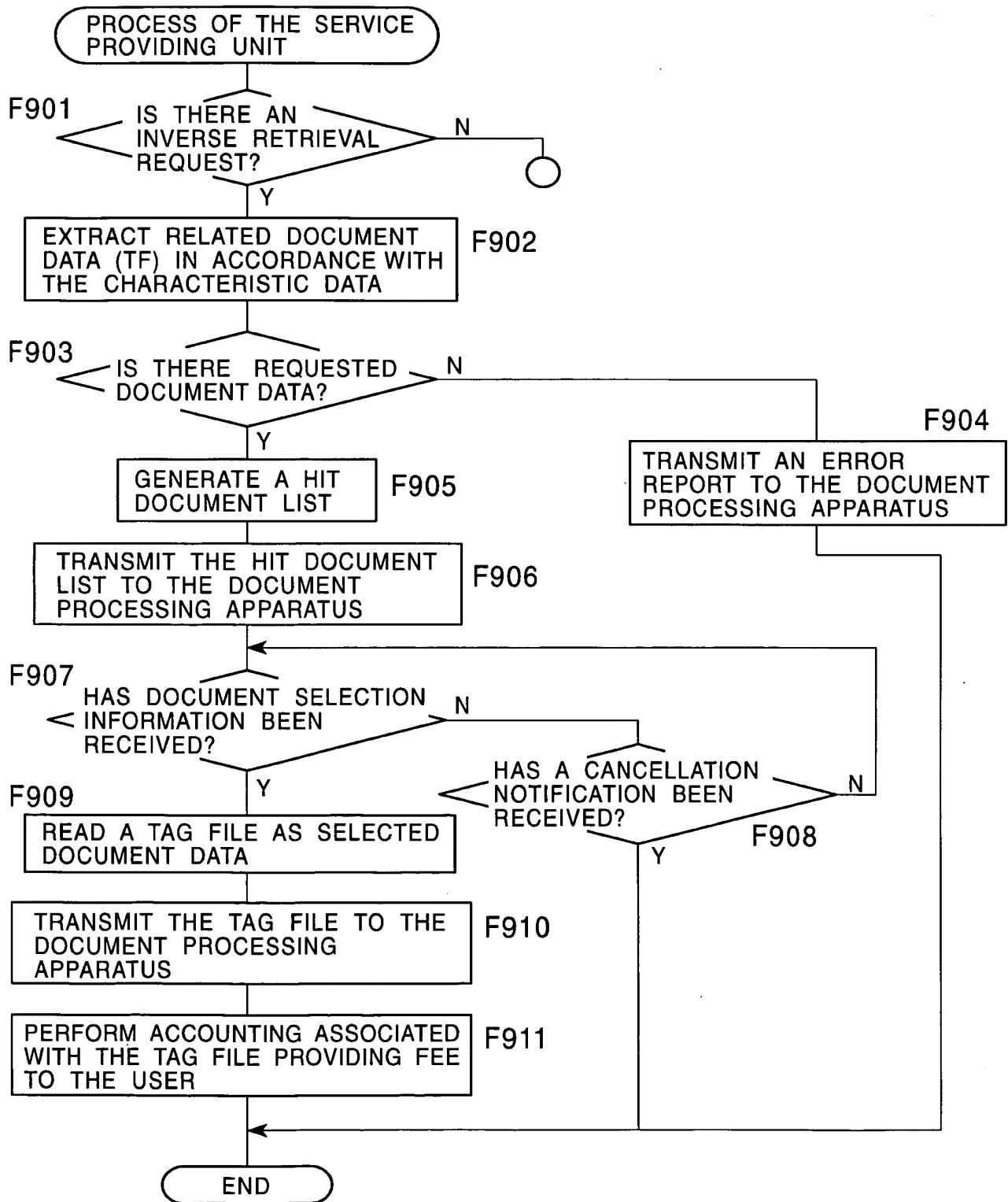


FIG. 60

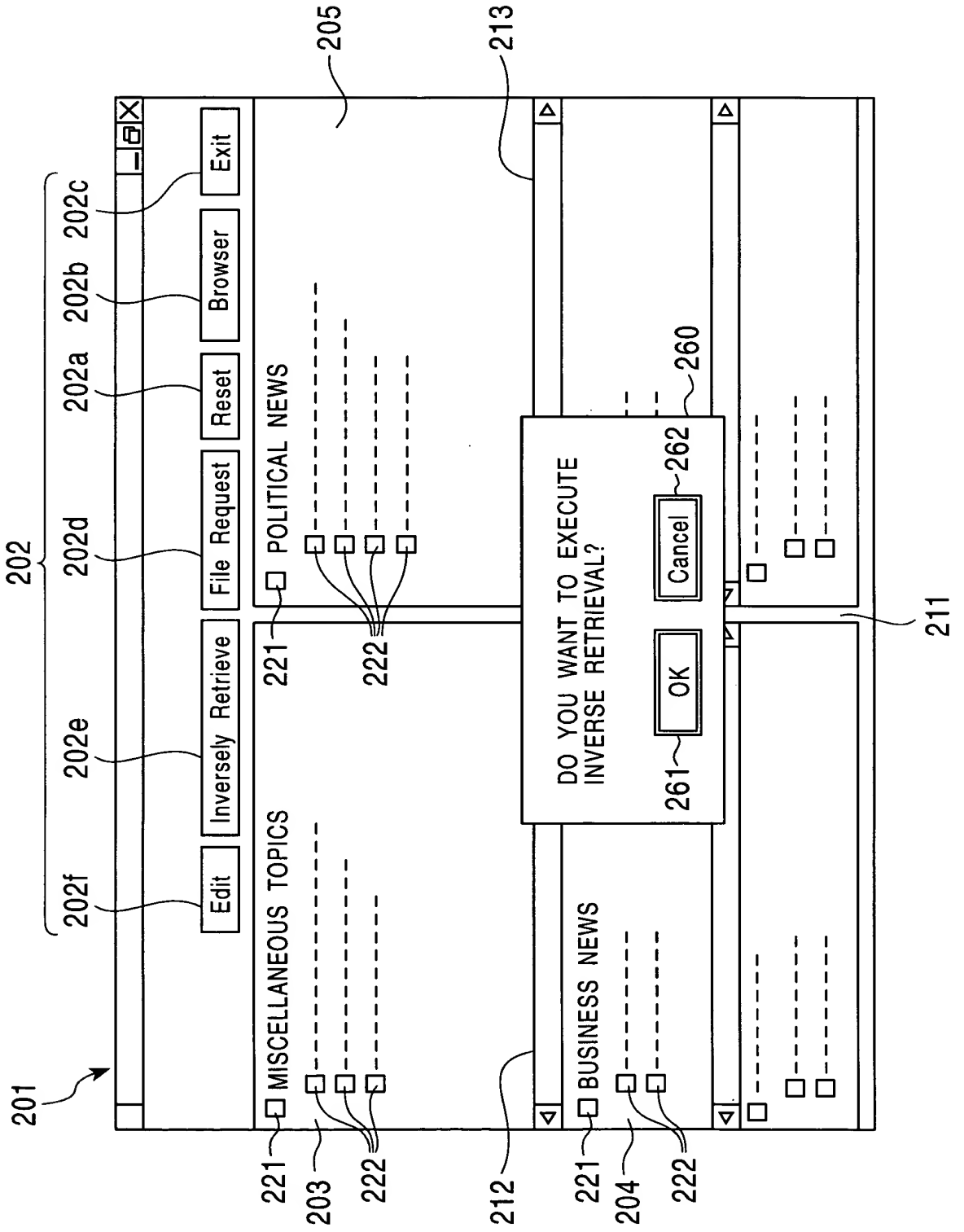


FIG. 61

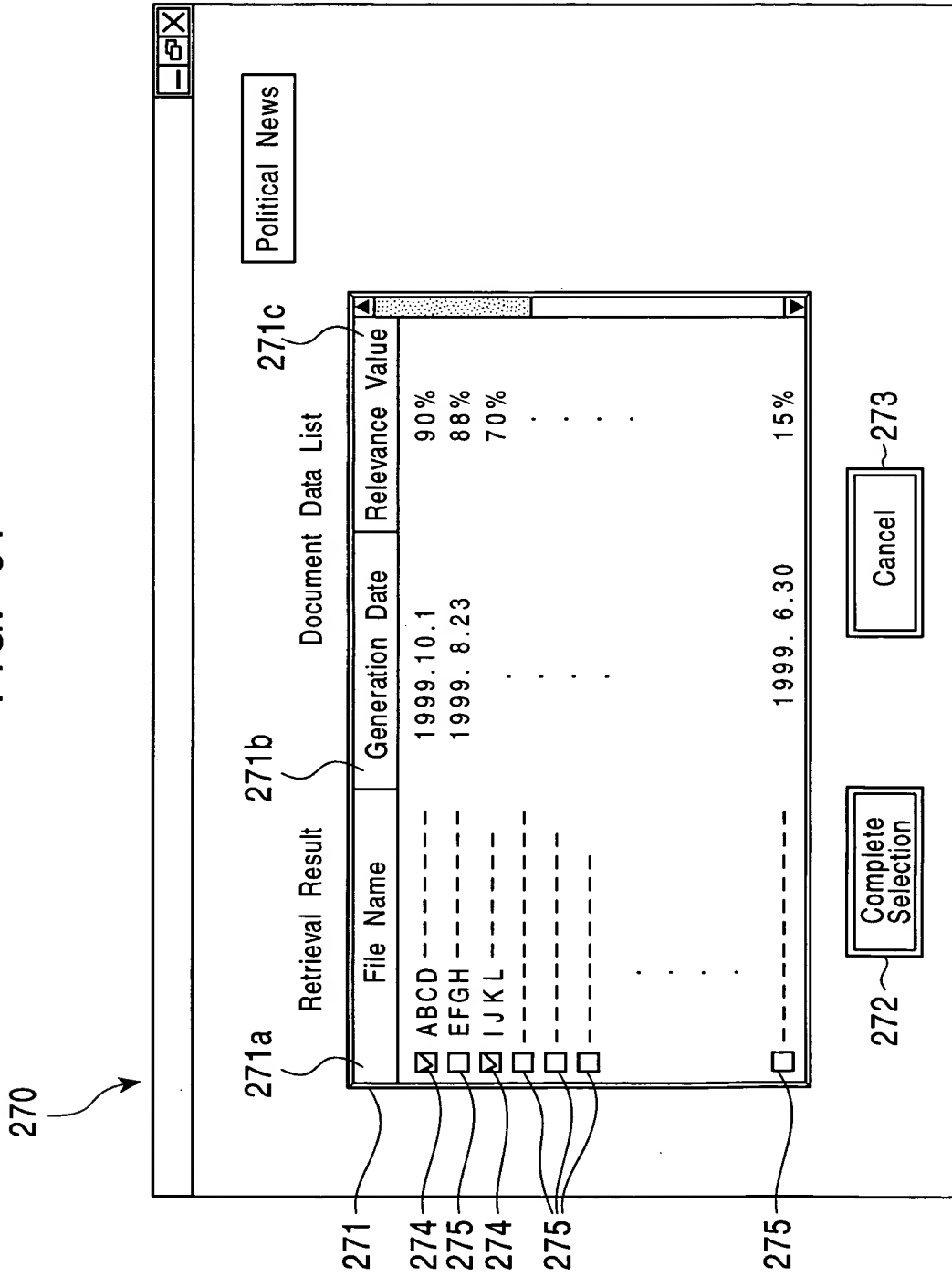


FIG. 62

